X

# PROGRESS REPORT

OF

# FOREST ADMINISTRATION

IN

# THE CENTRAL PROVINCES

FOR

# 1876-77,

By CAPTAIN J. C. DOVETON, M.S.C.,

CONSERVATOR OF FORESTS:

WITH A REVIEW BY THE CHIEF COMMISSIONER

AND

ORDERS BY THE GOVERNMENT OF INDIA.

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1877.

CALCUTTA

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No. 1418 F.

FROM

G. H. M. BATTEN, ESQ.,

*Offg. Secretary to the Government of India,*

To

THE CHIEF COMMISSIONER OF THE CENTRAL PROVINCES.

Department of Revenue, Agriculture and Commerce.

*Forests.*

SIMLA, *the 22nd October* 1877.

SIR,

I AM directed to acknowledge the receipt of Mr. Fraser's letter No. $\frac{3603}{171}$, dated the 17th ultimo, submitting the Progress Report of Forest Administration in the Central Provinces for the year 1876-77, together with your review thereon, and to state that the Governor General in Council is glad to observe from Captain Doveton's report that steady progress has been made in the forest administration of the Central Provinces during the year in question. Your careful and detailed review leaves little room for remarks on the part of the Government of India; but the following observations and suggestions are communicated for information and guidance.

2. The recorded area of the reserves has been increased from 2,332 to 2,391 square miles, by the addition of 58 square miles to the Moharli forest and by corrections in the area of some of the other reserves. The Governor General in Council is glad to observe that with regard to the formation of new reserves in the future, the necessity of selecting them in the vicinity of great centres of consumption and the open country has received due attention.

3. In paragraph 172 the Conservator points out that in many instances Government has within easy reach of the more thickly populated country, tracts of forest land which at present are comparatively unproductive, and advocates that the most advantageously situated of these should be taken in hand by the Forest Department with the view of producing in them those articles of forest produce for which there is the most certain demand. And in paragraph 39 of your review you say that one of the advantages which may be expected from the unreserved forests being looked after by forest officers is that opportunities will more readily occur for forming new reserves in areas easy of access, and that accessible tracts can be re-stocked with produce to supply the recurring demands of the future. These remarks the Governor General in Council considers are in the right direction, and they indicate one of the chief points which should be kept in view in selecting new reserves.

4. The facts recorded in the report and the remarks in your review, clearly show that with the exception of bamboos and some of the more valuable timbers, the demand for the produce of the reserves in the Central Provinces is as yet insignificant. The gross revenue from these estates during 1876-77 was only Rs. 1,84,255 from 2,391 square miles, or not quite 2 annas per acre, and during the last five years the rate has fluctuated from 0·9 to 2·7 annas per acre. The good management of these forests would contribute more to promote the well-being of a large population in

the towns and agricultural districts if they were not mostly situated at a great distance from the open and well cultivated country. The Conservator justly says in paragraph 170 of his report that it must be the general policy of the Forest Department to encourage consumption of forest produce. While therefore it is proper to contemplate the formation of additional reserves in the immediate vicinity of the open country, the extension of cultivation to the very edge of the reserves should be encouraged whenever there is reason to believe that a sufficient area has been demarcated to be permanently maintained as forest. Wherever fire protection is an established practice, the yielding power of a forest thus protected will be found to increase steadily, and it is desirable that the demand for forest produce should grow in the same proportion.

5. It is satisfactory to notice from paragraphs 9 and 10 of the report that the improvement of the boundary marks and the maintenance of the boundary lines of the reserves have the Conservator's attention. Having demarcated reserves and placed them under strict conservancy, it is the duty of Government to see that the boundaries of these estates are maintained in such condition that they cannot be mistaken by the people living in the vicinity of the forest.

6. The progress made in fire protection is clearly exhibited in two statements appended to the report, which are carried on to the 30th June 1876 and 1877 respectively. The aggregate area successfully protected until the end of the hot season of 1876 was stated in the report for 1875-76 to have been 358,595 acres. From the statements adverted to it would appear to have been only 353,661 acres, which was increased during the year to 504,824 acres, protected until the 30th June last. The additional areas were chiefly in the western reserves, *viz.*, Punassa, Rajaborari, Saoligar and Kamapur. It will be convenient if arrangements can be made in every annual report to carry on the statements exhibiting the progress made in fire protection to the close of the dry season.

7. It is satisfactory that, as stated in paragraph 27 of the report, the people in the vicinity of the reserves begin to recognize the benefits of fire protection in securing to them an abundant supply of grass at all seasons of the year.

8. The failure in the attempts made to propagate lac has been noticed with regret; it is evident that the conditions essential to success in this matter have not yet been sufficiently studied. Your orders that the experiments must be continued until satisfactory facts are arrived at, are approved. As regards Harra, the Conservator ought to make strenuous efforts to encourage the growth of this tree in suitable localities.

9. The financial results of the year have been as follows :—

| | | Rs. | Rs. |
|---|---|---|---|
| Receipts ... | ... | ... ... | ... 6,61,326 |
| Charges ... | A. ... | ... 1,67,334 | ... 2,88,640 |
| | B. ... | ... 1,21,306 | |
| | | Surplus | ... 3,72,686 |

The establishment and working charges are assigned by the Conservator in the following proportion to the following three great heads :—

| | Receipts. Rs. | Charges. Rs. |
|---|---|---|
| I.—Revenue from produce collected on account of Government, charged with 16 per cent. of establishment charges ... ... | 1,22,241 | 71,952 |
| II.—Other revenue, charged with 20 per cent. of establishment charges ... ... | 5,39,085 | 1,17,083 |
| III.—Works for the maintenance and improvement of the forests, charged with 64 per cent. of establishment charges ... ... | ... | 99,605 |
| TOTAL ... | 6,61,326 | 2,88,640 |

10. The unreserved forests continue to contribute the chief portion of the gross and surplus forest revenues. The Governor General in Council has already expressed his approval of the arrangements adverted to in paragraph 39 of your review, under which the executive management of the unreserved forests in the more important forest districts has been placed under the officers of the Forest Department.

11. His Excellency in Council endorses your commendation of Captain Doveton's services, and desires to acknowledge the steady progress which forest administration in the Central Provinces continues to make under your careful and active control.

I have the honour to be,

SIR,

Your most obedient Servant,

*Offg. Secretary to the Government of India.*

1877.

GOVERNMENT OF INDIA.

# DEPARTMENT OF REVENUE, AGRICULTURE AND COMMERCE.

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FORESTS.

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To

THE CHIEF COMMISSIONER OF THE CENTRAL PROVINCES.

*No.* 1418 *F.*

*Dated Simla, the 22nd October* 1877.

SUBJECT.

COMMUNICATES observations and orders on the Progress Report of Forest Administration in the Central Provinces for the year 1876-77.

Govt. Central Branch Press, Simla.—No 1018 R., A. & C.—23-10-77.—400.

No. $\frac{3587}{168}$

FROM

J. W. CHISHOLM, ESQ.,

OFFG. SECRETARY TO THE CHIEF COMMISSIONER,

*Central Provinces.*

TO

THE CONSERVATOR OF FORESTS,

*Central Provinces.*

*Dated Nagpur, the* 17*th September* 1877.

SIR,

I am directed to acknowledge your Forest Report for the past year, dated 22nd ultimo, and to express the regret of the Chief Commissioner at the unusual delay which has occurred in its submission. Your report for 1875-76 was received in June, and in future I am to request that arrangements may be made for submitting the annual Forest Report not later than June in each year.

2. With the exception of the two reserves in the Balaghat and Wardha districts, all the reserves were directly administered by Forest officers; while the unreserved forests were managed by Deputy Commissioners. Three reserves, viz., Bori, Bowergarh and Kamapur, were removed from the extensive area of the Western division, and formed into a separate charge. The aggregate area of the reserves at the close of the year was 2,391 square miles. The only addition made was in the case of the Moharli reserve, to which 58 square miles were added, and this reserve now includes a compact block of over 358 square miles. The demarcation of its whole boundary has been completely carried out.

3. The maintenance of proper boundary lines seems to receive regular attention. New boundary marks have been put down round the Bemaram and Mirkulloo forests, and in addition to the boundaries of all fire protected blocks, 733 miles of boundary were cleared at a cost of Rs. 1,080, which must be regarded as a moderate expenditure.

4. You comment in paragraph 13 on the extent to which the reserves are indented on to meet the recurring requirements of the people as illustrated by the details supplied in Statement F. The fact, however, is that it is for bamboos alone that the people generally have to make any steady call on the Government reserves. For other requirements their wants are, as a rule, supplied by the unreserved forests, and this is only what might be expected, for to these latter there is usually readier access, with fewer restrictions. Nearly half the bamboos removed are taken from the Moharli reserve, and almost all the mats and baskets for the market are made there. Cart axles too are chiefly removed from the Moharli reserve, and the number taken out has fallen from 62,848 to 24,748.

This is a very large decrease, which you cannot account for, but attribute partially to enhanced rates levied. The matter should be looked into, and rates reduced if they are found to press too heavily on the people.

5. The large decrease in the bamboos removed from the Korai reserve is noteworthy, viz., from 222,271 to 58,287. There may be some special reason for this, as also for the falling off in the removals from the Punassa reserve, and cutting may have been stopped. Again, compared with consumption, very little fuel and grass is removed from the reserves. The statistics you give of the average consumption of fuel are interesting; and your general conclusion is that the population requires about 5½ maunds of fuel per head per annum. Sufficient data, however, has not yet been collected to warrant any reliable conclusions from averages, and the amount of manure used as fuel in different localities varies so much that no safe calculation could probably be made of a uniform average consumption.

6. In most of the reserves there has been little necessity for resorting to criminal prosecutions, though in the Western Division the prosecutions have increased from 12 to 52, and the persons prosecuted from 50 to 135. If this number of prosecutions was absolutely necessary to check irregularities, the desired effect has probably been attained, and in future years it may only be necessary to take up the more serious cases. Ordinarily the Chief Commissioner considers that very petty prosecutions should be avoided by imposing full duty for breaches of rules committed by inadvertence, and the time of Forest subordinates be thus saved. It is clear, however, that few needless prosecutions were made during the year, for of 168 persons prosecuted 159 were convicted.

7. The measures taken for the management and improvement of the reserves are detailed in paragraphs 18 to 61 of your report. Great progress has been made in protecting forest areas from fire, and you are able to give the results including the dry season of the current year. The statement in the Appendix shows that up to the 30th June 1876, the area effectually protected was 353,661 acres. In 1876-77 an attempt was made to protect 517,890 acres, and actual protection was afforded to 504,824 acres. This too at a total cost of Rs. 10,098, or at an average of Rs. 12 per square mile. The Chief Commissioner considers these results as satisfactory.

8. You mention that during the last dry season only 15 fires occurred altogether; and of these only 2 extended over any large area, viz., at Punassa, area affected 4,100 acres, and at Hathko 4,256 acres. In the former case, the jungle seems to have been wilfully fired, and in the latter no trace has been obtained. There seems little reason to doubt that most of the fires are accidental, and it speaks well for the vigilance of your establishment that they have been able to confine within comparatively narrow limits the actual damage done by fire within the areas under protection. At Punassa the assistance rendered by the Malguzar and villagers is noteworthy.

9. Wherever fire is kept out of forests, the element of natural re-production is able to have full sway; and at Kurai, where fire protection has been effective in the teak producing area, there is an average in a survey line of 70 chains of 876 seedlings to the acre, of which 678 were teak; while in 20 square chains there were over 800 teak seedlings to the acre. Fair success seems to have attended the planting out of teak seedlings wherever undertaken, mainly for the purpose of filling up blanks; but this process can only be attempted on a comparatively small scale, and more could be effected if the experiments to sow broadcast after further careful trial prove successful. Occupying blnaks

by sowing in lines has apparently answered both at Garhakota and Korai; while at Saoligarh the cultivators in exchange for new available land are sowing their abandoned fields with forest tree seeds. Such an arrangement costs nothing, and may yield fair results.

10. Looking to the price of bamboos, the cultivation on the Pench river and in the reserves of Garhakota and Hathko will be of great future advantage. It is hoped that the planting out of bamboos near Telinhkeri will be successfully carried out. The Chief Commissioner is glad to hear that in the garden there the mahogany is doing well, and also two species of the eucalyptus.

11. The cutting down of badly grown teak trees flush with the ground, in order to produce poles, and to give good trees space to develop and produce seedlings, has been carried out in the reserves of Punassa, Rajaborari, Saoligarh and Hathko. It is only where there are many crooked useless trees which have suffered from being hacked at in their growth that recourse to this operation is desirable. The remarks of Mr. Fernandez on the subject, at pages 10 and 11, of the manner in which the work has been carried out by him, and of the general results obtained, are clear and to the point.

12. The artificial propagation of lac has been unsuccessful. You suggest that the denseness of a protected forest may be prejudicial to success, as lac cultivation is usually carried on in open jungles. The causes of failure are not yet clear, and until satisfactory facts are arrived at the Chief Commissioner considers that the experiments should be continued. It may be noted that the price of lac continues very low, the effect of which must be to discourage its propagation. On the other hand, Harra, which you mention, has greatly risen in value, and there seems every prospect of a steady demand. In some parts of the Province the Harra tree is very common, and the Chief Commissioner will be glad to receive practical proposals for encouraging its production, which your department could doubtless readily arrange for without the necessity of incurring increased expenditure.

13. The data collected as to the outturn to be expected from bamboo forests given in paragraphs 54 to 56 must prove of value to your officers; while the result of the surveys made in the Ahiri reserve in order to show the standing stock in these forests, as detailed in pages 13 to 18 of your report, is of special interest. Similar details may well, as opportunity offers, be collected for other important reserves.

14. The yield and working of the forests in the several divisions are fully described by you in paragraphs 62 to 82, and the Chief Commissioner considers that you have succeeded in showing a fair outturn for the year. In removing timber from the Banjer forests to the Gwarighat depot there has been marked success, and there seems hopes of the Gangar nala being rendered practicable for timber transport, in which case alternate carting and rafting would be no longer necessary, for water carriage would be available from the boundary of the Banjer reserve. The matter is specially important, as affecting the cost of all timber removed, and has the special attention of yourself and the Deputy Conservator.

15. You give details of the working of the Saw mills in the Southern division, and conclude that the cost of the work done was "nearly as expensive as hand labour." Sawing by machinery should certainly show a saving, and the Chief Commissioner fears that there must be a want of proper management in connection with the mills. Other details given under this section of your report do not call for remark. I am to request, however, that a report may be submitted of the result of the experiment of sending timber by river from Allapilli to Coconada.

16. Turning to the unreserved forests managed by District officers. These cover an area of 16,444 square miles, a portion of which is mere waste, and not covered by any forest at all. The modification of area, necessitated by orders issued during the year, are explained in paragraph 83.

17. In administering the unreserved areas it has not been necessary in most districts to resort to increased prosecutions for breaches of forest rules. There were 377 cases with 799 persons, compared with 505 cases and 1,276 persons in the previous year. Most of the prosecutions were for unauthorized cutting of timber.

18. The following comments are made on the details furnished by you as to forest management in each district:—In Nagpur the receipts have fallen off, and the charges have increased. The surplus is Rs. 11,290, compared with Rs. 17,261 in 1873-74. The system of management adopted seems extremely faulty, and is partly the old lease system, partly commutation, and partly licensing. The arrangements afford no real protection to the forests, and they involve apparently a minimum of revenue on produce removed. Clearly, forest matters have suffered from unavoidable changes in District officers, and no Deputy Commissioner has been able yet to take up the subject thoroughly. The revision of existing arrangements should be carried through as early as possible, for until they are completed the revenue and the forests must both suffer.

19. *Bhandara.*—The commutation system is in force in villages, and rates are levied on produce removed for export. The general revenue realized keeps at a fairly high figure, but commutation cannot continue as a permanent system of management, inasmuch as a fixed payment once made, produce can be removed at discretion, and consumption being thus stimulated, the forests are unnecessarily drained. There is the danger too under this system that produce under cover of commutation is removed for sale as well as *bonâ fide* for private use. There is nothing to show that any efficient checks exist to prevent this. Under such a system it is clear that all accessible forests will, by degrees, be exhausted; and the process of reserving such tracts in succession to admit of their being restocked, as recommended by you, deserves early attention.

20. *Chanda.*—Here the commutation has been devised so as to check any wasteful removal of produce from the forests. In most villages a rate of 2 annas per house is levied, and the head man pays at this rate to Government. On his part he is allowed to realize 2 annas a cart-load on wood and bamboos brought into his village, and to supply his own wants free of charge. What checks exist to present removal of produce for sale, is not stated. This system operates directly to the benefit of the malguzars, and what the State relinquishes they collect. Thus a case is mentioned in which a malguzar claimed Rs. 30 from three ryots, on whose account he had paid only 6 annas to Government. This is sufficient to show that a revision of the arrangements now in force is urgently called for.

21. *Wardha.*—The license system, as worked, does not seem to answer; and the unreserved forests yield but a small revenue, the annual surplus being only Rs. 6,342. Commutation has been suggested, but you seem to doubt whether the change would result in any improvement. As the charges absorb nearly 40 per cent of the receipts, a revision of existing arrangements appears called for. But without further information the Chief Commissioner hesitates to affirm whether commutation or a modified system of issuing licenses is most suited to the local circumstances of the district.

22. *Balaghat.*—A fairly regular revenue is realized, partly under the commutation, and partly under the license system. The whole district will probably

eventually be brought under the license system; for already commutation has resulted in the complete exhaustion of some of the most accessible forests. It was on this account proposed, as you mention, that a part of the Satpura reserve should be opened to commutation. Such an arrangement merely involved the destruction of a further forest area within a few years; and it was unnecessary, because the people could supply their wants by the payment of moderate forest rates on all produce removed. The people would naturally have preferred a small fixed payment and authority to remove ordinary produce free from all check. The accessible reserve would thus have been soon cleared, and this indeed constitutes the great objection to commutation in any tract where a populous area resorts for all requirements to a limited stretch of forest fairly easy of access.

23. *Sironcha.*—The receipts have fallen from Rs. 12,134 to Rs. 6,173, owing apparently to less timber having been supplied to the market. It is not clear why the Deputy Commissioner allowed the supply to fall off, and an explanation will be called for from that officer. The villagers commute for their requirements, and the arrangement is said to be suited to local circumstances.

24. *Jubbulpore.*—Neighbouring districts are largely resorted to to meet the requirements of the people of this district. The villagers are supplied under the license system, against which apparently no complaints are made. The aggregate receipts are not large, amounting to Rs. 16,443, and they have decreased within the last few years. The drain on accessible blocks has been great, and several have required to be closed against cutting altogether. A smaller revenue may therefore be accompanied by an improvement in the condtion of the forests.

25. *Saugor.*—The receipts, amounting to Rs. 34,000, are much the same as in the previous year, though considerably below the revenue of 1874-75. In the main the commutation system is in force. Certain blocks have been closed against cutting, and further reservations will doubtless be made as necessity arises. This course should certainly be followed as regards the small sandal wood tract to which you refer in paragraph 114.

26. *Damoh.*—In this district a license system has been in force, both for grazing and other requirements. The arrangements made by the Deputy Commissioner are fully detailed, and they have resulted in an increase of revenue, accompanied also by a considerable increase in establishment. The grazing rates strike the Chief Commissioner as being somewhat high, and also the rates on forest produce. These rates may well be compared with rates in adjoining districts, and reduced if necessary. Forest arrangements generally have received the Deputy Commissioner, Colonel Thomson's careful attention; but in imposing restrictions care should be taken that fair facilities are afforded the people for meeting their legitimate requirements.

27. *Seoni.*—A mixed system of commutation and licenses is in force, but it is proposed to supersede the commutation system altogether. So far the license system has worked satisfactorily. The revenue is well kept up, and maintains the level of former years.

28. *Mandla.*—In this district too the receipts remain equal to former years, while no changes have been made in the system of forest management. Harra sales brought a higher revenue, and the income from this source should steadily advance, considering the brisk demand that now exists for Harra.

29. *Betul.*—The revenue shows some tentency to decline. It is Rs. 22,180, compared with Rs. 46,418 in 1874-75. A mixed commutation and license system is in force, but the rates and grazing dues seem somewhat high, and this may have driven villagers to private jungles, which in the Betul district are extensive. In this case the falling receipts would remain amply accounted for.

30. *Chhindwara.*—The villagers supply their requirements by licenses, and grazing dues are collected in the same way. Minor forest produce is leased. The arrangements in force seem to have worked smoothly, and the receipts remain much the same as in the previous year, omitting outstandings. The large decrease of Rs. 5,000 under grazing is noteworthy. If due to mortality among cattle as suggested, the people must have suffered severely. Enquiries will be made on the point from the Deputy Commissioner.

31. *Hoshangabad.*—The Nimar system, which you describe as practically commutation, has been in force in this district during the year; but it has been found in working to have many disadvantages, and has been replaced by licenses available for a specified amount of produce removeable at once, and not current for the whole year,—an arrangement admitting of constant removals, difficult to check and liable to abuse. The Chief Commissioner agrees with you that the change is a move in the right direction, and that the arrangement would be better still if each license had a fixed money value issuing according to the amount of produce required, and on which no writing was necessary. This is the proper outcome of the existing license system, and after further elaboration may admit of being introduced. The receipts show an increase on the past year, and stand at Rs. 43,105. The success of the lac experiment in the Malni taluka is an altogether satisfactory result; and generally the forest administration seems to have received the Deputy Commissioner Major Rickett's close attention.

32. *Narsinghpur.*—The forests in this district are limited ; and, managed under the license system, yield only Rs. 9,055. The arrangements seem suited to local circumstances and are working smoothly.

33. *Nimar.*—In this district the system of commuting with issue of licenses, according to requirements, remains in force. The revenue realized stood at Rs. 43,294, against which the charges were Rs. 12,814. These latter are high, and the net revenue shows a decrease of nearly Rs. 5,000, chiefly due to a decrease in the demand for fuel for export. Efforts have been made to preserve the forests by reserving tracts from cutting which showed signs of exhaustion, and additional restrictions have been placed on the trees allowed to be cut.

34. *Raipur.*—The revenue is derived partly under commutation, and partly under licenses for removal of fixed quantities. There is little change in the receipts, and any loss of revenue that occurs results from commutation, owing to removals of produce being quite disproportionate to the fixed payment made. It may be found possible to remedy this at an early date by taking dues according to actual produce removed.

35. *Bilaspur.*—Here dues are taken as produce is removed from the forests, but the revenue (Rs. 12,082,) compared with the size of the district is small, because the requirements of the people are largely met from private forests,

36. The remarks made on the administration of the unreserved forests in different districts show that considerable changes are yet necessary before it can be said that the management generally is suitable and efficient. The obvious aim of a proper system, is to realize a fair revenue on all produce removed from the forests. A fixed payment with liberty to remove most produce at discretion, which is commutation, does not effect this; nor does a license system, where the full wants of a year are covered by a single payment based on estimated requirements, no effective checks being applied to quantities removed. The suggestion that printed passes should issue, each of fixed money value, and representing the units of different requirements, seems simple and practical. Thus for fuel the unit being taken as a cart-load of two bullocks, all fuel passes should be for this on a particular coloured paper, and be available at certain points to all applicants on payment of a fixed sum. This sum might be one, two,

or more annas per pass, and each applicant would take as many as would represent the number of carts of firewood which he required to remove. The passes would be delivered at the several forest posts, and thus the collecting and checking agency would be perfectly distinct. The same arrangement would apply to cart-loads of poles, grass, building timber, &c., a separate coloured counterfoil Pass book being used for the several kinds of produce removeable, and a fixed sum taken for each one issued,—applicants supplying themselves with the number of each kind necessary to meet requirements. Such passes would be transferable at the option of the holders, and would afford ample information of the actual produce removed. This is the system which the Chief Commissioner understands you to recommend for the unreserved forests, and he would be glad to see it have a fair trial. It would apply to all ordinary produce required by the great mass of the people. Large demands would be met by special licenses, while grazing dues and minor products would be separately arranged for.

37. The financial results of the year's operations give a surplus of Rs. 3,72,686, compared with Rs. 3,54,572 in 1875-76. The comparative figures are as follows:—

RESERVED FORESTS.

| | | 1876-77. | 1875-76. |
|---|---|---|---|
| Receipts ... ... | Rs. | 1,84,255 | 2,59,661 |
| Charges ... ... | ,, | 1,94,955 | 2,84,964 |
| Deficit ... ... | Rs. | 10,700 | 25,303 |

UNRESERVED FORESTS.

| | | | |
|---|---|---|---|
| Receipts ... ... | Rs. | 4,77,071 | 4,65,674 |
| Charges ... ... | ,, | 93,685 | 85,799 |
| Surplus ... ... | Rs. | 3,83,386 | 3,79,875 |
| Total Receipts ... | Rs. | 6,61,326 | 7,25,335 |
| Total Charges ... | ,, | 2,88,640 | 3,70,763 |
| Surplus ... ... | Rs. | 3,72,686 | 3,54,572 |

38. The surplus is larger than in any previous year, and the fluctuations in the receipts are due to special causes which you have explained. The charges have been classified against the different heads of working, but the distribution is to some extent arbitrary. No doubt certain of the charges should stand against the unreserved forests, especially a portion of the direction charges. As it is, the unreserved forests are only charged with the establishments exclusively employed in them, though these will now be under the direct control in most districts of Gazetted officers of the Forest Department.

39. The Chief Commissioner anticipates great benefit from the unreserved forests being looked after by Forest officers. Deputy Commissioners, with many demands on their time, are not uniformly successful in their management, and accessible forests near populous areas are doubtless being exhausted under commutation and other wasteful systems. Wherever this is happening, Forest officers will be in a position to point it out, and closing and rotation will rescue forest tracts which otherwise in a few years would inevitably disappear. Opportunities will more readily occur for forming new reserves in areas easy of access, and accessible tracts can be restocked with produce to supply the recuring demands of the future. The real effect in a few years ought to be, that

proper protection of the forests will be found to be quite consistent with a supply of the legitimate requirements of the people, and that every proposal made will secure both objects. You look forward in paragraph 175 to unreserved forests disappearing " as a permanent institution;" but this can only be in the sense that reserved and unreserved areas will be merged under one suitable system and management.

40. In conclusion, the Chief Commissioner desires to express his satisfaction with the continued success which attends your careful control and management of the department. He considers that your services merit approval and acknowledgment, as also the services of the officers who have co-operated with you, especially the officers mentioned at the close of your report.

I have the honor to be,

Sir,

Your most obedient Servant,

J. W. CHISHOLM,

*Offg. Secretary.*

No. B-74 of 1877-78.

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FROM

CAPTAIN J. C. DOVETON,

CONSERVATOR OF FORESTS,

*Central Provinces.*

To

THE SECRETARY TO THE CHIEF COMMISSIONER,

*Central Provinces.*

*Dated Nagpur, the 22nd August* 1877.

SIR,

I have the honor to submit the annual Forest Report for the year 1876-77.

2. The revenue and expenditure is arranged in this report according to the old classification in force during the past year, and the report itself and the returns attached to it, excepting those of areas protected from fire, will be in the forms in force up to the close of that year.

3. To facilitate the administration of the large charge known as the Western Division, the reserves of Bori, Bowergarh and Kamapur were separated from it, and temporarily formed into a separate charge designated the Pachmarhi Division. The reserves of Pandratola in Balaghat, and Erjarh and Dhuga in Wardha, remained in charge of the Deputy Commissioners of those districts. All the other reserves were administered directly by the officers of the Forest Department, while the unreserved forests were directly managed by the Deputy Commissioners of districts.

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## PART I.—SPECIAL.

### HEAD I.—STATE AND LEASED FORESTS.

### SECTION I.

*Area, boundaries, &c.*

Area.

4. The area of the reserves at the close of the year was 2,391 square miles and 606·69 acres, the details of which will be found in the prescribed form.

5. No new reserves were formed during the year, but in addition to the 150 square miles referred to in the report for 1875-76, 58 square miles and 226 acres were added to the Moharli reserve, thus increasing its area to 358 square

miles and 226 acres in a fairly compact block. The further increase in the area of the reserves exhibited by Statement A is not real, but merely the result of correct computation on the regular surveys recently made. A small plot of land with an area of 1 square mile and 126 acres was acquired in the vicinity of the Ahiri reserves,—Rs. 500, as compensation for the tank within its limits, and an equal area of Government waste being given in exchange. This area, being acquired for depot and such purposes, is not included in the Reserved Forests' return.

6. Since the close of the official year the reservation of the Chandgarh forests with an area of about 102 square miles has been sanctioned, and the demarcation of this tract has been carried out. Proposals for the reservation of a block of about 50 square miles near the station of Khandwa and between the Great Indian Peninsula and Holkar State Railways have been submitted for the Chief Commissioner's consideration.

**Demarcation of new reserves or additional areas.**

7. In the report for 1875-76, it was recorded that the demarcation of the additional 150 square miles then sanctioned for the Moharli reserve had been postponed, pending further consideration of the limits that should be assigned to this reserve. This subject having been considered and finally disposed of in the manner already indicated, the demarcation was carried out during the year under report. The new boundary fixed extends over 41 miles, 1 furlong and 10 chains; of which 10 miles, 5 furlongs and 6 chains are defined by nalas, the remaining 30 miles, 4 furlongs and 4 chains being defined by an artificial line cleared for the present to the width of 15 feet. The cost of demarcation was Rs. 141, or Rs. 3-6-10 per mile.

8. The Allapalli depot lands recently acquired were also demarcated, except where the Allapilli nala forms the boundary, by a cleared line 15 feet wide where forest growth exists, and land marks at convenient distances on the pattern adopted for the Ahiri reserves.

**Renewal of boundary marks.**

9. The old boundary marks put down round the Beemaram and Mircullu forests in 1867, 1868 and 1869, were found to have so far deteriorated as to necessitate their renewal. These have accordingly been replaced by squared posts of sound teakwood 4′ 9″ × 8″ × 8″, the upper 9″ of which are in the form of a pyramid; they have been sunk 2 feet in the ground, and around each, rising to the height of about 1 foot above the ground level, a platform of stones 4′ × 4′ has been laid down. The serial numbers of these landmarks have been stamped on in 2 inch figures, and the posts have been given a coating of white silicate paint to protect them against the weather. The cost of these landmarks has not exceeded Rs. 1 each, and it is hoped that an occasional coating of paint will cause them to last for a very lengthened period.

**Clearing of existing boundary lines.**

10. In the Inspector General's report of 17th April 1876, the state of portion of the boundary of the Satpura reserve was commented on. It was known that this portion of the boundary had become a good deal overgrown, and provision had been made in the budget for that year for re-clearing it; it was therefore simply through an oversight on the part of the Divisional officer that the work had not been carried out prior to the Inspector General's visit. Though unnecessary expenditure is carefully avoided these boundary lines are not neglected. During the year under report the boundaries of all fire protected blocks were of course cleared, and as regards the remaining areas the

greater portion of the boundaries were cleared. The details of this work are as follows :—

| Reserves. | Length of boundary cleared. | Cost. | | |
|---|---|---|---|---|
| | | Rs. | a. | p. |
| Bowergarh ... ... | 78 miles. | 46 | 14 | 0 |
| Kamapur ... ... | 129 „ | 72 | 2 | 10 |
| Kalibheet ... ... | 78 „ | 97 | 8 | 0 |
| Rajaborari ... ... | 139 „ | 93 | 13 | 9 |
| Saoligurh ... ... | 85 „ | 52 | 7 | 0 |
| Poonassa ... ... | 26 „ | 55 | 12 | 0 |
| Satpura ... ... | 208 „ | 661 | 3 | 5 |
| Total ... | 733 miles. | 1,079 | 13 | 0 |

## Section II.

### *Requirements of the population, &c.*

11. Very little is as yet known regarding the quantity of forest produce of different kinds essential to the comfort and well-being of the people. Of the different classes of wood, fuel is of course consumed in the largest quantities. Regarding the quantity of this produce necessary for a given population in these Provinces, numerous inquiries regarding the consumption in individual cases have led to the conviction that for the average household of five members 3 seers per diem is on the average the maximum amount necessary. This rate of consumption equals about 5·47 maunds per head of population per annum, and the following statistics collected during the year in the Saugor and Nagpur districts tend to show that this estimate is fairly correct :—

| Name of Town. | Population. | Rate of consumption per 1,000 head of population in maunds. | | | |
|---|---|---|---|---|---|
| | | Wood Fuel. | Manure. | Charcoal. | Total. |
| | | Mds. | Mds. | Mds. | Mds. |
| Nagpur .. | 84,400 | 4,120 | 1,500 | 230 | 5,850 |
| Deori .. | 7,769 | 3,140 | Not known. | 45 | 3,185 |
| Saugor ... | 45,655 | 2,530 | | 123 | 2,653 |
| Kurai .. | 4,965 | 5,216 | | 88 | 5,304 |
| Rehli ... | 7,085 | 5,391 | | 31 | 5,422 |
| Garhakota ... | 9,085 | 5,764 | | 34 | 5,798 |

It will be observed that of the fuel brought into Nagpur for consumption no less than 126,000 maunds was made up from manure; and allowing that the bulk of the manure locally produced during the dry season is converted into fuel, the actual consumption of fuel must be somewhat higher than is represented by the foregoing figures.

12. Some statistics regarding the consumption of building wood and bamboos were also collected, but records of this kind require to be kept for a series of years before any correct conclusions can be drawn from them. The fact that the past year was unfavourable for the extraction and transport of forest produce tends to render the information collected less valuable.

13. It is not possible at present to record with any degree of accuracy the extent to which the requirements of the people have been met from the unreserved forests, but it is a certain fact that from these forests, the bulk of the produce consumed has been taken. Of the share the reserves have taken in meeting these demands, a tolerably correct idea may be formed on reference to Statement F,—"produce removed by purchasers." This statement exhibits a steady increase in the demand on the reserves under all heads except building wood and cart axles. The decrease under the head building wood exhibited by this form is not, however, real, as there were more pieces of large dimensions than in the previous year; while the decrease in the number of cart axles does not indicate a permanent decrease in the demand. It is partially due to the slightly enhanced rates levied, but cannot at present be fully accounted for. The quantity of grass and fuel taken from the reserves, though still small, shows a very considerable increase over the quantities removed in previous years; and there can be no doubt that the demand on the reserves for these products is increasing more rapidly than the return referred to would indicate, for during the past year, the removal of produce was from time to time stopped by unseasonable rains, which rendered cart traffic impossible and immediately afterwards rendered it necessary that most of the draft cattle should be applied to agricultural work. The demand for grass will steadily increase with the extension of fire conservancy, which admits of larger quantities being cut; nevertheless it cannot be denied that so far as these products which will not bear heavy carriage charges are concerned, the present reserves can only meet the requirements of a very limited portion of the population.

## Section III.

### *Protection.*

14. The revised scale of permanent establishment sanctioned by Government of India in the Financial Department No. 1869, dated 29th March 1876, has already increased, and will further increase the efficiency of the protective arrangements in the reserves.

15. The Forest Act of 1865, and the rules framed under it, have remained in force without alteration. Protection of State forests is chiefly secured by the ordinary laws of the land, which meet most of the requirements of the department; while the acquisition of permanent rights in these forests is guarded against by precautionary measures.

16. The number of prosecutions for offences committed in the reserved and unreserved forests are shown separately, according to districts and divisions, in the prescribed Form C. In this form the Southern and Eastern divisions are conspicuous by the absence of prosecutions; but in the latter division there are only two small reserves, while in the Southern division the firing of forests is the only head under which offences necessitating prosecution are at present likely to occur. The chief increase in prosecutions is in the Western division, and is chiefly due to the energy of the Divisional Officer and some of the upper subordinates. It in no way indicates extreme severity but merely the putting down the malpractices with a strong hand. The recent demand for sleepers is possibly in some way connected with the increase in Forest offences.

It will be observed that of 168 persons prosecuted for offences committed in the reserves, 159 were convicted; this gives a very small proportion of acquittals.

17. The practice of exempting people who committed petty offences from prosecution, on their paying the price of the produce removed, as fixed by the

Forest Department, has been continued. In many instances this practice falls more lightly on the parties concerned than being sent before a Magistrate, irrespective of the punishment they would be likely to receive at his hands.

## SECTION IV.

### *Management and Improvement.*

Protection of forests from fire.

18. In the area under protection from fire there has been a very considerable increase. Apart from the expediency of this extension, it has to a great extent been necessary under the plan on which fire protection was commenced in some of the reserves; and this is fully illustrated by the comparatively low figure at which protection was secured in Rajaborari and Saoligarh. Details regarding the areas under protection are given for the official year in Statement D.

19. The area protected up to the 1st April 1876, as exhibited by this Statement, differs from that shown in the statement for the previous year, for the following reasons.

The area brought under protection in the Central division was under-estimated, while the area burnt was not accurately known and was under-estimated. Several minor corrections have been made in the recorded areas of blocks brought under protection in 1875-76; while the Pandratola reserve, which was omitted from previous statements, in consequence of doubt as to whether protection was really secured, is now included in the Statement for 1876-77. As such annual statements include the work of two seasons, a separate statement for the season 1875-76 in the prescribed form hereafter to be adopted is attached. This statement, as it takes in the whole dry season of 1875-76, comes up to a later date than the form attached to the report for the year, and consequently exhibits somewhat different results. It will be observed that during that season 3,53,661 acres were actually protected from fire at a cost of Rs 12,541-11-0, or Rs. 22-11-1 per square mile. The areas burnt during that season up to 31st March 1876 were referred to in the report for 1875-76. Those burnt between the close of the year 1875-76 and the commencement of the succeeding dry season, were as follows:—

| | | |
|---|---|---|
| 1.—On 19th May 1876, in the Taroba block, Moharli ... | 1,600 | acres. |
| 2.—In the Kurai block, on 14th May 1876 ... | 16,240 | ,, |
| 3.—In Garhakota block, on 26th May 1876 ... | 220 | ,, |
| 4.—In Punassa, on 30th May 1876 ... | 10 | ,, |
| 5.—In Bori, 19th May 1876 ... | 3 | ,, |
| 6.—In Bowergarh, on the 14th, 21st and 24th May 1876. | 6,400 | ,, |

Of these fires, the first was traced to a lad who was watering village cattle at a spring immediately inside the boundary; but the evidence, though tolerably conclusive to an experienced forester, was not sufficient to be accepted in a Court of Justice: the second fire was adverted to in the previous year's report, but its extent was incorrectly quoted; it resulted from the northern boundary not being cleared to a sufficient width. No. 4 was the result of a tree being struck by lightning; while No. 6 was the work of two or three people who appeared to have wilfully fired the forest, but who escaped detection. The other fires were unimportant and call for no special remark.

20. The unavoidable delay in the submission of this report enables me to append a statement showing the cost and success of fire conservancy during the season 1876-77, which gives a more correct idea of the work of the past year in which all arrangements for the past season had to be made. From this return

it will be seen that of 5,17,890 acres attempted to be protected, fire was actually kept out of 5,04,824 acres.

21. The new areas taken up are chiefly in Rajaborari, Saoligarh and and Punassa, and comprise the most accessible portion of those forests not hitherto protected.

22. The fact of there having been casual showers during the hot months would at first lead to the belief that the season had been exceptionally favourable for fire conservancy. This, however, is not the case; those showers were only sufficient to check the risk of fire for a short time; and in most of the protected areas, owing to the regular rains not setting in, the danger lasted till much later in the season than usual, while the cold weather rains rendered the timely clearing of the fire lines difficult, and in many cases more costly than it would otherwise have been.

23. The total cost of fire conservancy during the season 1876-77 was Rs. 10,097-13-3, which gives for the area actually protected 5,04,824 acres =788·78 square miles, an average cost of Rs. 12-12-10 per square mile.

24. As might be expected in so large an area, several fires occurred; the actual number was 15, of which the most extensive or important were as follows:—

| | | | |
|---|---|---|---|
| 1.—In Rajaborari, on 10th and 11th April 1877 | ... | 250 | acres. |
| 2.—In Punassa, on 3rd January 1877 | ... | 4,100 | ,, |
| 3.—In Kamapur, on 12th May 1877 | ... | 1,920 | ,, |
| 4.—In the Taroba block, on 22nd April 1877 | ... | 300 | ,, |
| 5.—In the Goverdhan block, on 6th and 7th May 1877 | ... | 285 | ,, |
| 6.—In Hathko, on 26th May 1877 | ... | 4,256 | ,, |

No. 1 is believed to have been wilfully lighted to obliterate marks of theft. but the offenders have not been detected; Nos. 3 and 5 may have been accidental but their origin has not been traced; 2, 4 and 6 were without doubt wilfully created; No. 4 was traced and conviction obtained; as regards No. 2 strong suspicion falls on two individuals, but proof is wanting; while the originators of No. 6 have not been discovered.

25. Of the 15 fires that occurred, 3 only extended over more than 350 acres, which speaks well for the energies of the establishment, and indicates fairly good organization. The general success of these undertakings and the reduction of their cost during the season 1876-77 is very satisfactory.

26. In the Kurai block some selected lines for roads were cleared as subdivisional fire lines. These secondary lines meet and cross the Jamun and Bawanthiri nalas and their chief feeders, thus dividing the block into ten compartments, which will, to some extent, facilitate the control of fire should it again enter this part of the reserve. Secondary lines are also maintained in most of the forests under protection.

Reconciliation of the people to fire conservancy.

27. The assistance rendered by Malguzars and villagers on the occurrence of fire in Punassa shows clearly that we may expect the spirit of opposition to this protective measure, at first experienced, soon to die out. Nor will this be a matter for surprise, for though fire conservancy may occasion some inconvenience to the people, it is not in most cases without some direct counterbalancing benefit to them, for it makes available a supply of grass at times when they

have leisure to cut it, whereas, were there no protection from fire, all the grass would have been destroyed.

Effect of fire protection on natural reproduction.

28. The effects of fire conservancy are most marked in Ahiri, Bori and and Kurai. In Jagmandal it is not so marked, not on account of the soil, which is excellent, but owing to the smaller number of seed bearers where required, and partly to the crop of bamboo. In Ahiri the improvement is chiefly confined to the tree-bearing parts of Bemaram; in the true bamboo forest little tree reproduction could as yet be hoped for, but in the parts of Bemaram above referred to the young crop is complete, excepting on the dry ridges, where a greater admixture of other species is necessary if sound timber is to be produced, and in this portion teak is decidedly well represented. In Bori too the reproduction of teak has made good progress, though, owing to the large extent of bamboo, it has progressed irregularly in open glades and in blanks, resulting from the dying off of bamboo clumps. A survey line of 70 chains running straight through part of the teak-producing area of Kurai gives an average per acre of 876 seedlings of seven principal kinds, of which 678 were teak. Of course they were not evenly distributed in this proportion to the acre, but the figures suffice to show that the reproduction of teak by seed is progressing very favourably: of the 70 square chains surveyed, 20 contained teak seedlings in proportion above 800 to the acre, 6 square chains at the rate of 600 to 800, 9 square chains at the rate of 400 to 600, 16 square chains at the rate of 100 to 400, while only 19 square chains give a smaller proportion than 100 per acre. These figures speak well for the distribution of teak in this part of the forest. It is, however, in the southern portion of this forest that reproduction has been best. In the northern part little progress in the reproduction of teak is as yet noticeable.

Effect of fire on forests that have been permanently protected.

29. I had wished here to have given some remarks on the effect of fire in forests that had previously been protected, but this subject must be reserved till I can write more fully than at present regarding it. I may, however, state that I have found no reason to change the opinion previously expressed by me on this this subject.

Clearing of natural seedlings.

30. This work has not been pushed on at Kurai to the same extent as in previous years, owing to the available labour being required for sowing and weeding the young plantations formed to fill up blanks and improve the crop; nevertheless upwards of 2½ lakhs of seedlings are reported to have been weeded; and, as attention is only given to the better kinds, this represents a considerable stock.

Filling up of blanks and introducing trees of the better kinds.

31. In the Goverdhan block over an area of 30 acres, 1,900 young teak, raised in nurseries, were planted in lines among the existing crop, at a cost of Rs. 69 or Rs. 5-7-0 per acre. With the view of giving the plants, which have to contend with an existing crop on the ground, the advantage of not having their growth checked by transplanting, and giving them a start by having around their roots at the commencement a supply of rich mould, a portion of the plants put out last year were first potted in rich soil in bamboo baskets; very few of the plants thus put out died, a few were cut off by the larvæ of beetle, and in a few instances the baskets with the plants were rooted out by wild hog. Many of the plants looked strong and healthy last cold season, but the result of experiment cannot at present be recorded. The failures are at present estimated at 25 per cent.

32. In the Bemaram forest also, where teak was wanting, 3,640 teak seedlings were put out in lines 10 feet apart, at a cost of Rs. 43-2-1 or Rs. 4-12-8

per acre. Here, where the small wood is of little value, it would have been better to plant in lines 25 or 30 feet apart, and this will be attended to in future.

33. At the close of the year 10,000 teak seedlings were available for planting at Moharli in the rains of 1877. There can be no doubt that teak at Moharli will be worth at least 6 or 8 annas per foot more than at Ahiri, and it is therefore important to increase its production in the former forest.

34. In Punassa some experimental sowings of teak, bija, saj, kair and mokha were made on the plot system, the plots being 2 feet square and 6 feet apart, in lines 12 feet apart. The loosening of the soil appears to have attracted wild hog, which grubbed up most of the seedlings, while hares did their part in nibbling off the young plants.

About 100 acres were also experimentally sown broad-cast with teak, saj and bija. Of the teak seed, though it had previously been soaked in pits made in the ground, very little germinated during the past rains. It was intended to weed bands of this sowing at wide intervals, but labour was not available, and seeing that the place is infested with wild hog and hares, it is as well that it was not weeded.

At present it is impossible to determine the result of this experiment, but there is every reason to believe that the system will succeed over a large area of our forests, though it may be slow to show results. Its great advantage is the very trifling outlay that it necessitates. Arrangements have been made for broad-casting on a much larger scale during the rains of 1877. And I have already learnt that between 300 and 400 acres have been sown with anjun, teak and other species.

35. In Saoligarh the inhabitants of some of the forest villages have, on the condition of their being allowed fresh land for cultivation, undertaken to prepare their old fields for sowing with forest seeds, and some abandoned fields have in this way been prepared during the current year. This arrangement has this disadvantage, that much has been taken out of the surface soil by cropping previous to the forest sowing. Nevertheless moderately good results may be expected from it, and it has the advantage of costing nothing. It is proposed in this way to restock the greater portion of the blanks and tracts at present covered with inferior species.

36. In Kalibheet a large plot comprising several abandoned fields, aggregating about 100 acres, has been prepared by ploughing up the entire surface, which has been done twice at a cost of Rs. 52-2-0 or a trifle over 8 annas per acre. This area has been sown broad-cast this dry season with teak seed previously soaked, with the view of securing within a shorter space of time, the conditions under which teak seed ordinarily germinates in these Provinces. Ere this the area will have been broad-casted with saj, tinus, and some other good species. Weeding will only be carried out in bands, leaving the seedlings in the intermediate space to take care of themselves.

37. In 1874 and 1875, 14 acres of blank were stocked in Garhakota by sowing in lines prepared 6 feet apart. The total expenditure on this area has been up to date Rs. 99-0-10 or Rs. 7-1-2 per acre. The existing stock is estimated at 24,000 trees, of which about 12,000 are teak. The plants of 1874 were looking strong and healthy when I saw them in the cold season.

38. The following particulars are furnished by the Assistant Conservator, Central Division, regarding the filling up of blanks by sowing in the Korai block.

| Year. | Area. Acres & Chains. | | Cost of preparing land. | | | Cost of sowing and resowing. | | | Cost of weeding. | | | Cost of draining. | | | Cost of collecting seed. | | | Total up to 31st March 1877. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Rs. | A. | P. | Rs. | A. | P. | Rs. | A. | P. | Rs. | A. | P. | Rs. | A. | P. | Rs. | A. | P. |
| 1872 ... | 6 | 0 | 98 | 0 | 0 | 14 | 0 | 0 | 10 | 14 | 6 | . | ... | ... | ... | ... | ... | 122 | 14 | 6 |
| 1874 ... | 19 | 9 | 145 | 14 | 0 | 26 | 4 | 6 | 13 | 9 | 0 | 30 | 11 | 0 | 4 | 3 | 0 | 220 | 9 | 6 |
| 1875 .. | 18 | 1 | 33 | 13 | 0 | 63 | 7 | 9 | 8 | 3 | 0 | ... | .. | ... | 3 | 0 | 0 | 108 | 7 | 9 |
| 1876 ... | 49 | 8 | 370 | 8 | 0 | 122 | 4 | 6 | ... | ... | .. | .. | ... | ... | 26 | 2 | 9 | 508 | 15 | 3 |
| 1877 ... | 75 | 0 | 401 | 1 | 9 | ... | ... | ... | ... | | | ... | . | ... | ... | .. | .. | 401 | 1 | 9 |

It is reported that the sowing of 1872 will require one, and those of 1874 and 1875 two more weedings. The season of 1876 was not favourable, owing to the want of rain at the time the seeds other than teak germinated; the rains of 1877 should, however, bring up a good crop of teak, while there will be a moderate admixture of other species produced naturally. The area prepared for sowing in 1877 includes 11 acres prepared but not stocked in the previous year, at a cost of Rs. 81-11-9; the remaining portion was prepared at a cost of Rs. 5 per acre. Hitherto the plot system in lines has been adhered to at Korai, but it will probably now be abandoned in favour of sowing in bands, but the result of experiment in this matter must first be seen; the only risk in this method at Korai is of the loosened soil in the lines attracting wild pig.

39. Arrangements are also being made for the artificial production and cultivation of bamboos on the Pench river and in the Garhakota and Hathko reserves, in each of which localities a high value attaches to this product.

40. The sowings made in previous years at Telenkheri are coming on well, except where the young trees were destroyed by rats. The latter portions were sown broad-cast with species that rats were known to avoid or which they were not likely to attack, and now, excepting on a small area where the land is excessively poor and on a small strip with thick matty grass, there is a good crop on the ground. About 1½ acres were sown with sisoo during the past cold season, the seed being sown on broad low ridges 15 feet apart. This crop was intended as a nurse for mahogany and eucalyptus, which have been planted out at distances of 30 feet in the lines. The mahogany are doing well and so are two species of eucalyptus; of the latter the narrow-leafed iron bark (E. crebra) promises best; its growth is not so rapid but the trees are very healthy and have tough bark and leaves, which of course give them a great advantage in a climate like that of the Central Provinces. A large number of bamboos have also been raised at Telenkheri for planting out on the hills to the north of the tank.

**Cutting or removal of creepers.**

41. The destruction of creepers and useless scandent shrubs is part of the duty of the protective establishment. In Korai only were special measures adopted during the year for the destruction of creepers. Here 1,500 acres in block L 8, where the work was most urgently required, were cleared of creepers at a cost of Rs. 125-0-3. The crowns of the roots were well battered with the back of the axe, and though many have thrown up fresh shoots it is expected that the majority will die out or be so weakened as to give the forest growth a chance of suppressing them. In the Western Division creeper cutting has gone hand in hand with the copsing of badly grown trees, but in this division, except in a few localities, creepers are not very numerous.

**Cutting over of badly grown trees.**

42. The expenditure on this operation being charged against the out-turn, this subject will have to be adverted to under the head of yield and working, but as the operation has as its chief object the improvement of the forest, something must be said of it here.

These operations have been confined to the Punassa, Rajaborari, Saoligarh and Hathko reserves.

43. The principle recognised in these operations is very correctly described in the following extract from Mr. Fernandez's report :—

"In the reserves of this Division there are many tracts, large and small, the crop on which is fairly full and sometimes complete, and is composed chiefly, and not in a few instances, almost entirely of teak. A very large proportion of this teak is badly grown on high stumps, and can never grow into sound useful trees. The percentage of teak being extremely large, the immediate production of seedlings of that species does not appear to be necessary. It has therefore been considered profitable, both to the public purse and to the forest, to hasten, as much as circumstances require, the replacement of these useless trees by straight well grown poles, many of which could develop into valuable timber. To this end every badly grown stem of teak, without exception, in such tracts is cut back flush with the ground. The few straight and promising trees that are left will develop into valuable timber, and at the same time be the means of producing a few seedlings, which will later on advantageously take the place of shoots on the stool. An idea of the present crop may be gathered from the fact that more than 50 per cent of the teak, cut according to this plan, is simply unsaleable. Of the new stool crop that is now coming up as the result of the cutting, it would not be too sanguine to expect one saleable stem at least as the average up-growth of every stool cut. Where teak is in the minority it is left untouched in the interest of seedlings."

44. Seeing that such operations can only be directed by the officers of the superior staff, and must be carried out under the direct superintendence of subordinates, it is no matter for surprise if principles accepted for guidance have not everywhere been strictly adhered to, and as a matter of fact they have in several instances been deviated from. Gradually, however, the subordinates acquire a more perfect knowledge and appreciation of what is required of them, and it is certain that ere long there will be many subordinates to whom such operations can be entrusted without necessitating the constant direction of the superior staff.

These operations are undertaken regularly in blocks that are already under fire protection or are to be protected from the commencement of the following season.

45. Mr. Fernandez has not given the number of trees or stumps cut over in the reserves of Punassa, Rajaborari and Saoligarh, but, as will be detailed in paragraph 73, the number of saleable poles obtained was 30,011, while over 40,000 trees and stumps were cut, which gave no marketable produce. The total cost of the operation in those reserves was Rs. 958-4-5.

46. In Hathko the cutting over of badly grown teak was carried out over an area of 500 acres comprising one compartment, and gave an out-turn of 20,600 marketable pieces. The copsing was not carried out till after December, but I understand that shoots from the stools have already made good progress. Some interesting remarks on the growth of teak from the stool are given in the following extracts from Mr. Fernandez's annual report :—

"Doubts have sometimes been expressed as to whether the majority of teak shoots from the stool will grow up straight. It is a fact frequently noticed that the leader suddenly bends about in various directions. The cause of this curious phenomenon is still to be ascertained, although it is well known that weakness of the roots, poverty of the soil, or insufficiency of direct sunlight produce by themselves the same effect. This tendency to grow up crooked is chiefly to be noticed in shoots that stand on high stools. Such shoots retain the character of a branch for a more or less protracted period, and the stronger tendency just alluded to is perhaps chiefly due to the partial but nearly complete atrophy of the old roots of the stool or stump and the late and weak development of new roots. This supposition

is strengthened by the singularly small number of such crooked shoots on the stools which have been cut flush with the ground, and it has been ascertained that with this system of cutting numerous and vigorous new roots develop from the beginning of the second year all round the stool down to a depth of at least 15 inches from the surface of the ground. Provided therefore that the stools are cut flush with the ground, there is every reason to expect, that by far the largest majority of the shoots will be straight, which is as much as can be hoped for in the case of any tree growing as an infinitesimal fraction of a forest under the most favourable circumstances possible in nature.

"It will not be out of place to record here the fact that some old and weak teak stools have been observed to throw up shoots only the second growing season after being cut, presenting apparently the aspect of a dead stool during the first growing season. The cause of this will be watched.

"The unusually heavy winter rains during January and February have had an effect on the development of teak stool shoots, which it is interesting to notice. In Saoligarh and Rajaborari (Jawarda) many of the two previous seasons shoots brought forth new leaves and made a little growth in height but more in diameter. While of the stools of this season, the earliest of which were cut during the second week in January, a large percentage have thrown up shoots which are already some of them 2½ feet high, and those which have not done so, have, however prominent, well developed buds protruding beyond the outer bark, which only require the first burst of the monsoon to shoot up vigorously."

47. In connection with the copsing work in Punassa the difficulty of procuring labour, even at the most exhorbitant rates, was adverted to in last year's report. It is satisfactory that in spite of the higher price of food grain during the current year the temporary importation of labourers from the other reserves has brought the rate for wood-cutters down to 3½ annas per diem. It is expected that all difficulties in this matter will soon disappear.

Lac propagation.

48. The experiments in lac propagation are far from satisfactory. When the Inspector General of Forests visited the Korai. plantation in January 1876, he predicted that the insects would soon kill the trees on which they were. The trees on which the lac then was are, however, in perfect health, but no lac has been yielded by them, and there is no sign of living insects on the trees, all having died off in the hot season of 1876. In the Southern Division the failures have been complete; and in the Western Division the attempts at propagation have not been successful. In the Southern Division, however, no propagation was attempted last season, in consequence of the previous failures, and consequently what proved a favourable season was lost. In Bowergarh the crop promised well in the cold season, and from the Reserves Rajaborari and Kalibheet there may yet be a fair out-turn, as the past hot season has been favourable to the development of strong and healthy insects. In Hathibari 12 maunds were collected and sold, but only, half of this was the result of Departmental propagation, the balance being purchased and re-collected after being used for seed. In Hathibari and Kantra Nala 3,450 trees were reported to be well stocked.

49. The appearance of lac on a male carob tree at Telenkheri during last rains attracted attention. The cold season evolution has produced a quantity of fairly thick lac, and there is every reason to believe that the second evolution which has now taken place will give a good crop for one tree. The circumstance is interesting, as the tree is foreign to this country; and being a perfect evergreen, has the advantage of affording shelter to the insects throughout the hot season.

50. Unsuccessful as lac propagation in the reserves may yet have proved, I would not recommend the attempt at artificial propagation being altogether

abandoned, but before taking further action in the matter I propose taking an opportunity of studying the system practised in the east of the Provinces, where artificial cultivation is most successful. As far as I have been able to ascertain, the natives who propagate artificially look forward to many failures and an occasional bumper crop. If this be actually the case, it is evident that lac only succeeds under exceptional climatic conditions, which can only be determined by lengthened observation. Moreover, lac propagation is generally confined to the more open jungles which are kept clear by grazing and burning, and it seems possible that the atmosphere of an ordinary protected forest may be prejudicial or even fatal to the insect.

51. The very considerable rise in the value of Hurra that has taken place in the last few years has made apparent the necessity of fostering the growth of this species and the production of its seed. To this end it is proposed, wherever this species is numerous in the less accessible and poorer forests, to give space and light to the Hurra, by clearing away other species; and instructions to this effect have issued from this office. The exact yield that may be expected from an acre of Hurra grove is not known, but it could scarcely at any time fall short of 30 maunds per acre, and the present market value is Rs. 2 per maund. The demand appears to be steadily increasing, and the higher price has resulted in more being collected.

Production has not, however, increased, and there appears no chance of its doing so, unless some special measures are adopted by Government.

Under these circumstances should there be every prospect of the demand holding good the formation of regular Hurra groves in localities best suited to the tree, will be a subject worthy of consideration. The great drawback to such an undertaking is the time that must elapse before a return will come in.

52. As all forest management must depend on the conditions that have to be dealt with this appears an appropriate place for the record of valuation survey and meteorological observations.

53. Hitherto no information has been obtained or recorded regarding the out-turn that may be expected from bamboo forests in these Provinces. The past season was not a favourable one for the collection of data on this subject, for it is well known that owing to the unfavourable rains of 1876, the rate of production was far below the average; nevertheless any information on this subject must be useful and instructive, and I will therefore record the data obtained last season in the Sonawani and Ahiri forests.

54. In the Sonawani forest a small linear survey covering 4 acres was made in the true bamboo forest. The number of clumps and new shoots counted were as follows :—

| | | |
|---|---|---|
| 1st Acre. | 137 clumps. | 327 shoots of 1876. |
| 2nd ,, | 147 ,, | 346 ,, |
| 3rd ,, | 132·5 ,, | 212 ,, |
| 4th ,, | 122·5 ,, | 231 ,, |
| Total ... | 539 ,, | 1,116 ,, |
| Average per acre... | 134·75 | 279 ,, |

In connection with these figures it has to be borne in mind that the bamboo in these forests has been but slightly worked, and that the demand on them has hitherto been much below the rate of production. This is an important fact, inasmuch as it is tolerably certain that working, if not excessive, is calculated to increase production.

55. The acres containing bamboo forest in Bemaram give an average of 58·4 clumps per acre; the maximum number of clumps per acre being 106. In Mirkulloo the survey of 34 acres containing bamboo forest gave an average of 74·94 clumps per acre; the maximum number of clumps per acre being 16[illegible].

56. In the Mirkulloo forests the shoots of the previous season were counted in 200 clumps. The average obtained from this enumeration was 2·99 shoots per clump. Of the 200 clumps, 7 produced no new shoots, 68 one, 28 two, 30 three, 17 four, 15 five, 19 six to nine, and 5 upwards of ten shoots, one clump having nineteen. Here it must be remembered that the bamboo forest is not worked while the rain-fall, as recorded at Allapilli near the forest, was during the year 1876-77 only 38·78 inches.

57. In the report for the past year the valuation surveys then in progress in the Ahiri forests were adverted to. These linear surveys have been extended in such a manner as to give a fairly accurate idea of the standing stock in these forests, the survey lines having been most carefully and judiciously laid out. The details of these surveys will be recorded and kept in a book. An abstract showing the result of the surveys is given in the following extracts from Mr. Thompson's Report:—

"These valuation surveys commenced early in February 1876, and were conducted up to the close of the open season. The details of only one survey were furnished with the report for last year, viz., a survey of 34 acres, and the method adopted was explained in paragraph 13 of that report. It, however, appears necessary now to give a complete history of these surveys in this report, and I will therefore re-submit details of that part of the work completed before 1st April of last year.

"The total area over which valuation surveys were carried out is 213 $\frac{8}{10}$ acres; of this in Bemaram there were 128 acres, and in Mirkulloo 85 $\frac{8}{10}$ acres.

"In Bemaram the surveys naturally divide themselves into two parts, viz. survey of the lower or plains portion, and survey of the Bemaram hilly portion.

"The number of independent summary carried out in each was:—

| | | |
|---|---|---|
| Plain portion | . | 4 = 78 acres. |
| Hilly portion | . . | 4 = 50 acres. |
| Total | ... | 8 =128 acres. |

"In the Mirkulloo Reserve 3 surveys were carried out.

"The following is a summary of the results of these surveys:—

*Bemaram Reserve.*

I. Plains portion; 78 acres surveyed.

| | I. Class. | II. Class. | III. Class. | IV. Class. | Total. |
|---|---|---|---|---|---|
| Teak ... | 2·410 | 1·718 | 3·153 | 6·089 | 13·370 |
| Sissoo ... | 0·051 | 0·410 | 1·846 | 2·718 | 5·025 |
| Saj | 1·461 | 2·038 | 2·820 | 6·282 | 12·601 |
| Kaim . | 0·743 | 1·012 | 1·641 | 1·141 | 4·537 |
| Kosum | 0·115 | 0·192 | 0·115 | 0·166 | 0·588 |
| Huldoo . . | 0·141 | 0·051 | 0·025 | 0·076 | 0·293 |
| Beeja ... | 0·064 | 0·231 | 0·410 | 0·397 | 1·102 |
| Total ... | 4·985 | 5·652 | 10·010 | 16·869 | 37·516 |

"Teak seedlings and saplings under 6 inches in girth 9,249=118·576 per acre.

II. Hilly portion; 50 acres surveyed.

| | I. Class. | II. Class. | III. Class. | IV. Class. | Total |
|---|---|---|---|---|---|
| Teak ... | 4·00 | 4·28 | 7·48 | 8·30 | 24·06 |
| Sissoo ... | 0·06 | 0·06 | 1·46 | 3·50 | 5·08 |
| Saj ... | 0·58 | 0·54 | 0·54 | 2·38 | 4·04 |
| Kaim ... | 0·38 | 0·40 | 0·68 | 1·16 | 2·62 |
| Kosum ... | 0·24 | 0·24 | 0·24 | 0·34 | 1·06 |
| Huldoo ... | 0·12 | 0·08 | 0·18 | 0·34 | 0·72 |
| Beeja ... | 0·04 | 0·08 | 0·22 | 0·20 | 0·54 |
| Total ... | 5·42 | 5·68 | 10·80 | 16·22 | 38·12 |

"Teak seedlings and saplings under 6 inches girth 4,390=87·80 per acre.

"Before proceeding to give a summary of the surveys carried out in the Mirkulloo Reserve it is necessary to explain here one or two matters in connection with the Bemaram surveys.

"In the first place there was only one survey of 34 acres (of which the record was forwarded with last year's report) in which the actual composition of the forest was attempted to be found. All the other surveys, including those of Mirkulloo, included in the counting the following species only :—

1. Teak.
2. Sisoo.
3. Saj.
4. Kaim.
5. Kosum.
6. Huldoo.
7. Beeja.

NOTE.—Saplings and seedlings of 6 species were counted. Saj was excluded as, owing to the massive thickets of seedlings, it was impossible to count them. Saj saplings averaging over 10 feet high were counted.

"Secondly in only two surveys were bamboo clumps counted, giving the following results :—

"Survey of 17 acres hill portion of Bemaram. Clumps 584 counted over 10 acres, giving an average of 58·4 clumps to the acre. The highest number of clumps counted per acre on the Bemaram hill was 106,—the lowest 9.

"In the Mirkulloo Reserve 34 acres were surveyed containing bamboo forest; the result being 2,548 clumps counted, giving 74·94 clumps per acre.

"The largest number of clumps counted on any one acre was 165,—the lowest was 6.

*Mirkulloo Reserve.*

SUMMARY OF SURVEYS;

79 acres in Divisions B and C.

| | I. Class. | II. Class. | III. Class. | IV. Class. | Total. |
|---|---|---|---|---|---|
| Teak ... | 1·468 | 2·164 | 7·341 | 7·405 | 18·378 |
| Sissoo ... | 0·063 | 0·075 | 0·797 | 2·949 | 3·884 |
| Saj ... | 0·556 | 0·531 | 1·405 | 2·113 | 4·605 |
| Kaim ... | 0·126 | 0·114 | 0·493 | 1·367 | 2·100 |
| Huldoo ... | 0·012 | 0·012 | 0·012 | 0·088 | 0·124 |
| Beeja ... | 0·025 | 0·088 | 0·405 | 0·443 | 0·961 |
| Kosum ... | 0·037 | 0·037 | 0·088 | 0·291 | 0·453 |
| Total ... | 2·287 | 3·021 | 10·541 | 14·656 | 30·505 |

"Teak seedlings and saplings under 6 inches girth 7,632=96·606 per acre.

6 $\frac{8}{10}$ acres surveyed in Division A.

| | | I. Class. | II. Class. | III. Class. | IV. Class. | Total. |
|---|---|---|---|---|---|---|
| Teak | ... | 0·588 | 2·353 | 4·118 | 4·706 | 11·765 |
| Sissoo | ... | 0·000 | 0·000 | 0·882 | 1·764 | 2·646 |
| Saj | ... | 0·441 | 1·764 | 6·176 | 9·265 | 17·646 |
| Kaim | ... | 0·000 | 0·000 | 0·000 | 0·000 | 0·000 |
| Huldoo | ... | 0·000 | 0·147 | 0·000 | 0·000 | 0·147 |
| Beeja | ... | 0·000 | 0·000 | 0·882 | 0·029 | 0·911 |
| Kosum | ... | 0·000 | 0·147 | 0·147 | 0·147 | 0·441 |
| Total | .. | 1·029 | 4·411 | 12·205 | 15 911 | 33·556 |

"Teak seedlings and saplings under 6 inches girth 811=119·264 per acre.

"The results of these surveys as they appear in the foregoing summaries, coincide with the actual conditions under which the forests exist, and thereby attest their value. For instance in the hilly portions of Bemaram the teak counted is as 24 to 13 in the plains portion, the excess appearing in all classes in the former. A condition easily accounted for; the accessibility of the forest being difficult, as compared with the lower ground around the base of the hills; besides the actual density of teak is greater on the hill slopes than on the plains. Allusion here is made only to the growing stock.

"Taking Sissoo we have the same proportion per acre all through, because Sissoo, as a timber, was never felled in the Zamindari from which the Reserves have been segregated.

"Saj is a plains loving species, certainly in these Provinces, and delights in deep alluvium, and can exist on a clayey soil, but it best thrives on one in which both drainage and retention of moisture are equally proportioned. These conditions are found in the plains portion of Bemaram, the hills being too dry. Composed of massive syenitic rocks they have not much soil on the surface except in dells and depressions. The general slope of the hill too is against deep soil formation, and from it we find the Saj excluded, but established in the plains, where it almost equals the teak in numbers, being represented in the hills in the proportion of only as 1 to 6 of teak. Kaim in the alluvium is found in more abundance than in the hills, whilst the reverse is the case with Kosum.

"Turning to the Mirkulloo surveys we find teak of the average density of 18¼ trees to the acre, while Saj stands at 4½ trees to the acre. The formation of Mirkulloo is gneiss with here and there syenitic rocks but no alluvium, with a small exception. Again the density of teak is lowered in the Mirkulloo range of hills by the existence of a bamboo forest. In Division A., where the formation is much of it alluvium, we find Saj running up to 17½ trees per acre as against nearly 12 of teak.

"If we analyse further, we recognize in the figures obtained by these surveys that Mirkulloo is a young forest compared with Bemaram, as will be seen by the following :—

"In Bemaram we find that before the forest was worked for the teak the average per acre (counting stumps) of each class stood, in the plains portion :—

| | | | |
|---|---|---|---|
| Teak | I Class per acre | ... | 6·320 |
| | II " " | ... | 5·474 |
| | III " " | ... | 7·204 |
| | IV " " | | 8·601 |
| | Total | | 27·199 |

In the hill portion—

| | | | |
|---|---|---|---|
| Teak | I Class per acre | ... | 7·34 |
| | II " " | .. | 7·18 |
| | III " " | | 11.72 |
| | IV " " | | 12·12 |
| | Total | ... | 38·36 |

" In Mirkulloo the same condition of the forest is represented by the following figures, taking those yielded by the survey of 79 acres.

| | | | |
|---|---|---|---|
| Teak | I Class per acre | ... | 3·024 |
| | II " " | ... | 3·328 |
| | III " " | | 9·999 |
| | IV " .. | | 12·087 |
| | | Total | 28·438 |

" Mirkulloo it will be seen, has matured only half as many trees of the two first classes as Bemaram, while the III and IV classes are pretty nearly the same in Mirkulloo and the hilly portion of Bemaram. The absence of a similar proportion of trees of these two classes in the plain portion of Bemaram is undoubtedly due to the destructive character of the annual fires, fed by the long coarse grasses which then formed the undergrowth, and which happily under existing protection arrangements are fast dying out.

" An examination of the Mirkulloo forests shows that it is not very long since portions of it were under Dyah cultivation, which can also be traced as having marched over the entire area,—attested by the ages of the trees and the existence of bamboo forests, the older forests having nearly in all instances cleared themselves of the bamboo undergrowth.

" Excluding stumps, the present stock of growing teak on the ground per classes per acre stands as follows :—

*Bemaram.*

Plain portion.

| | | | | |
|---|---|---|---|---|
| Teak | I Class | ... | ... | 2·410 |
| | II Class | ... | | 1·718 |
| | III Class | .. | | 3·153 |
| | IV Class | ... | . | 6·089 |
| | | | Total .. | 13·370 |

Hill portion.

| | | | | |
|---|---|---|---|---|
| Teak | I Class | ... | ... | 4·00 |
| | II Class | .. | .. | 4·28 |
| | III Class | ... | . | 7·48 |
| | IV Class | ... | . | 8·30 |
| | | | Total .. | 24·06 |

*Mirkulloo.*

Divisions B and C.

| | | | | |
|---|---|---|---|---|
| Teak | I Class | ... | ... | 1·468 |
| | II Class | ... | ... | 2·164 |
| | III Class | ... | ... | 7·341 |
| | IV Class | ... | ... | 7·405 |
| | | | Total ... | 18·378 |

A Division.

| | | | | |
|---|---|---|---|---|
| Teak | I Class | ... | ... | 0·882 |
| | II Class | ... | ... | 2·500 |
| | III Class | ... | ... | 5·000 |
| | IV Class | ... | ... | 7·647 |
| | | | Total ... | 16·029 |

"A healthy sign in these teak forests as they at present stand is to be found in the fact of the sum of the two lower classes of trees, exceeding that of the two higher classes per acre, thus :—

| | | | |
|---|---|---|---|
| Bemaram I and II classes | 4·128 | III and IV classes | 9·242 |
| | 8·28 | | 15 78 |
| Mirkulloo | 3·632 | | 14·746 |
| | 3·382 | | 12·647 |
| Total . | 22·422 | | 52 415 |

"The total stock now standing in the forests of 7 valuable species enumerated in the surveys has been computed from the averages per acre obtained. These show that we have in the two reserves a total stock of—

| | | | | |
|---|---|---|---|---|
| Teak I and II Classes | ... | 1,16,273 | Trees. | |
| III and IV " | . | 2,91,861 | " | 4,08,134 |
| Sissoo I and II " | ... | 3,928 | " | |
| III and IV " | .. | 90,876 | " | 94,804 |
| Saj I and II " | | 32,569 | " | |
| III and IV " | ... | 93,687 | " | 1,26,256 |
| Kaim I and II " | . | 15,339 | " | |
| III and IV " | . . | 41,483 | " | 56,822 |
| Kosum I and II " | . | 5,880 | " | |
| III and IV " | | 13,182 | " | 19,062 |
| Huldoo I and II " | | 2,682 | " | |
| III and IV " | . | 5,589 | " | 8,271 |
| Beeja I and II " | .. | 3,079 | " | |
| III and IV " | ... | 13,877 | " | 16,956 |

"The estimated area occupied by bamboo forests is—

| | | |
|---|---|---|
| Bemaram, | acres | 1,697 |
| Mirkulloo | " | 5,627 |

which give as the growing stock in clumps in—

| | | |
|---|---|---|
| Bemaram | 99,104 | clumps. |
| Mirkulloo | 4,21,687 | " |
| Total | 5,20,791 | |

"The number of young shoots of 1876 counted in 200 clumps showed an average of 2·99 shoots to the clump, or a total annual increment to the stock of bamboo of 15,55,413 stems.

"It is necessary to compare results of the present surveys with the actual enumeration of the teak trees carried out in Bemaram by Captain Jarrett and Mr. Hicks in 1869 and 1871, and in Mirkulloo by Captain Fox in 1870. Below are given the various results of these operations.

*Bemaram.*

| | Teak I Class. | II Class. | III Class. | IV Class. | Total. | Unsound | Grand total. |
|---|---|---|---|---|---|---|---|
| Capt. Jarrett .. | 50,204 | 45,921 | 86,778 | 71,579 | 2,56,714 | 94,949 | 3,51,663 |
| Mr. Hicks ... | 11,613 | 21,809 | 31,947 | 33,274 | 93,653 | 96,554 | 1,95,207 |

*Mirkulloo.*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Captain Fox . | 15,732 | 19,496 | 31,421 | 23,253 | 89,902 | 19,303 | 1,09,205" |

58. On the most important survey lines running right through the plain portion the forest, the trees of all species were counted. From this enumeration the average per acre of trees not included in the foregoing figures has been obtained. The following statement, compiled with the help of these figures, gives the standing stock of all species from 1',6" and upwards in girth in the plain portion of Bemaram with an area 388,3 acres.

| N | Species. | Class. I. | Class. II. | Class. III. | Class IV. | Total. | Percentage of total number |
|---|---|---|---|---|---|---|---|
| 1 | Teak ... | 9,358 | 6,671 | 12,243 | 23,643 | 51,915 | 14 5 |
| 2 | Shishum ... .. | 198 | 1,592 | 7,168 | 10,554 | 19,512 | 5·4 |
| 3 | Saj ... ... | 5,673 | 7,914 | 10,950 | 24,393 | 48,930 | 13 7 |
| 4 | Kair ... . | 2,885 | 3,930 | 6,272 | 4,430 | 17,617 | 4 9 |
| 5 | Other species ... . | 3,304 | 6,185 | 32,286 | 1,77,093 | 2,18,868 | 61 5 |
| | Total . | 21,418 | 26,292 | 69,029 | 2,40,113 | 3,56,842 | 100 0 |

59. The first and most striking fact exhibited by these figures is the large proportion which teak of the 1st class bears to other trees of that class, and it supports the conclusion drawn from general observations that teak will outtop any other species in this forest. The second point is the want of proportion between the 2nd class teak and the teak of other classes; but this circumstance appears to be fully accounted for by the fact that prior to 1867 the preference was often given to 2nd class trees for felling. The small proportion of shishum in the higher classes is striking, but the forest is not well adapted to the production of this species. The proportion borne by the saj of different classes is remarkably regular, as might be expected, as this species has never been cut. This is the only species at all likely to compete with teak in the Ahiri forests, and it will therefore be instructive to compare the proportion in the different classes of this species and teak. It will be seen that there are of teak in the 1st and 2nd classes 16,029 trees, but only 26,643 in the 4th class; while of saj there are in the 1st and 2nd classes only 13,887, and in the 4th class 24,393 trees. From these facts there are only two conclusions that can possibly be drawn, viz., that the reproduction of teak has diminished, or that, of the trees that attain 4th class size, a larger proportion of teak than of saj pass into the 2nd and 1st classes. For the first of these conclusions, there are no grounds beyond the fact above noted regarding the proportion of the trees in different classes; while, as regards the second, we know that in the early stage of its existence teak developes powerful terminal shoots, while saj does not, and that it attains its full height at an earlier stage of its existence than saj, and thus gains the chance of suppressing saj where there is not room for both. Of the other species, the majority never grow into large trees, as is fully illustrated by the proportion the 1st and 2nd class trees of those species bear to their total number. If then, as there is every reason to believe, teak has the power of overtopping the other trees of the forest, the existence of a fair number of teak saplings and seedlings and their distribution is of great importance, while, the proportion that these bear to the seedlings and saplings of other species is comparatively unimportant.

60. The average per acre of teak seedlings and saplings as obtained from the results of 4 linear surveys covering 78 acres in the plain portion of Bemaram is 119, which appears a very fair average for a broad leafed species like teak. The details of the survey of 21 acres have not yet reached this office, but

looking to the figures for the remaining 57 acres, it is found that the teak seedlings are distributed over the area surveyed as follows :—

| Number of acres. | Average per acre. | | |
|---|---|---|---|
| 2 | 529 | Seedlings and | Saplings. |
| 1 | 336 | do. | do. |
| 2 | 257 | do. | do. |
| 7 | 217·7 | do. | do. |
| 6 | 166·5 | do. | do. |
| 9 | 137·4 | do. | do. |
| 5 | 108·8 | do. | do. |
| 13 | 89·6 | do. | do. |
| 5 | 67·0 | do. | do. |
| 4 | 36·0 | do. | do. |
| 4 | 18·0 | do. | do. |

Thus on 32 out of 57 acres there is sufficient young teak on the ground to form, if it all grows up, pure teak forest, a condition which, however, is not desired, and would of course be avoided. For a natural forest that has never been under regular treatment, the distribution of the young teak crop appears excellent.

61. Meteorological observations were started at Allapilli near the Ahiri Reserve in March 1876. The following table exhibits so much of the result of these observations as it is desirable to record in this report.—

| Month | Monthly averages. | | | Highest maximum. | | Lowest minimum. | | Rain-fall. | | Number of days on which rain fell. |
|---|---|---|---|---|---|---|---|---|---|---|
| | Dry bulb minimum. | Wet bulb minimum. | Dry maximum. | Date. | Degrees. | Date. | Degrees. | | | |
| April 1876 | * | * | 105 | 26th and 27th | 110 | ... | * | . | 8 | 1 |
| May | 77 | * | 108 | 12th and 13th | 113 | 17th to 26th | 73 | .. | 5 | 4 |
| June | 81 | 75 | 101 | 15th | 111 | 8th | 75 | 3 | 62 | 13 |
| July | 76 | 74 | 89 | 1st 8th and 9th | 98 | 21st and 24th | 72 | 15 | 45 | 22 |
| August | 75 | 73 | 89 | 8th and 9th | 95 | 29th | 72 | 7 | 71 | 24 |
| September | 74 | 72 | 87 | 8th | 93 | 5th 8th & 12th | 72 | 7 | 18 | 11 |
| October | 62 | 61 | 89 | 15th and 17th | 92 | 30th | 55½ | | | |
| November | 53 | 52 | 87 | 3rd and 12th | 90 | 23rd and 24th | 46 | . | . | 2 |
| December | 47 | 46 | 85 | 11th and 12th | 87 | 21st | 41 | . | | ... |
| January 1877 | 55 | 54 | 86 | 30th | 93 | 1st and 3rd | 40½ | 1 | 9 | 4 |
| February | 62 | 60 | 89 | 27th and 28th | 96 | 10th | 50½ | | 34 | 1 |
| March | 67 | 64 | 98 | 22nd | 103 | 5th | 59 | 2 | 54 | 8 |
| Year | ... | ... | 92·7 | ... | ... | ... | ... | 38 | 78 | 90 |

The spaces marked* have not been filled up, owing to incompleteness of the records. The record of temperature for September and October is from the observations on the first 17 days in September and the last 17 days in October, the record not having been kept for the remaining days of those months. It will be observed that there were only two months, October and December, in which no rain fell; but, though a somewhat similar circumstance may have to be recorded in the current year, the figures do not represent the distribution of the rain-fall in ordinary years, and the fact must render the thermometric conditions recorded equally unusual. The lowest minimum was 40½°, the highest maximum 113°.

## SECTION V.

*Yield and working.*

62. In the Northern Division the cutting of grass in all the reserves has been permitted, and the removal of dead wood as fuel would be allowed were there a demand for it. There has been no felling of green wood, but felled and dead timber, as will be specified further on, has been collected by Departmental agency. Grazing has not been allowed in the reserves of Jagmandal, Choharigogarh, the Banjer forest, Motinala, Barela, Singrampur and Bijeragogarh. With the view to future improvements efforts are being made to create a demand for bamboos from Jagmandal, and though no bamboos have yet been removed it is hoped that these efforts will not be without success.

63. In the Western Division the cutting of grass and removal of dead wood as fuel has everywhere been permitted; and except in the areas protected from fire the cutting of bamboos and inferior woods by purchasers was allowed. The copsing of teak, already referred to as a work of improvement, has been carried on in Block No. II of Punassa, in continuation of the same work near Jawarda and Magarda in Rajaborari, and in continuation of the work near Dekna in Saoligarh. The two last mentioned forests have not yet been divided into blocks, but the work is nevertheless being carried out continuously and regularly. The principles by which these operations are regulated have already been given in paragraph 43. From Kalibheet the only teak cut and removed was obtained from wind-falls and trees washed down by the floods of 1876.

64. The Bori Reserve remained closed against all cuttings; and from the other two reserves in the Pachmarhi Division (Bowergarh and Kamapur), the cutting of inferior species and bamboos, and grazing were allowed without restriction, except in the areas under protection from fire. The removal of dead teak from the last mentioned forest was also permitted.

65. In the Central Division the blocks under protection from fire have been entirely closed during the hot months, and at no time has the grazing of cattle been permitted; in other respects the reserve has been open for grazing, the cutting of grass and bamboos, and removal of dead wood. To meet the requirements of a few villagers near the forest a little small wood has been cut, but the quantity has been too small to necessitate any restrictions.

66. In the Ahiri forests of the Southern Division no produce has been felled. In the Moharli Reserve 88 square miles were open for the removal of timber of the unreserved kinds; while with the exception of the blocks under protection from fire the whole forest was open for the cutting of bamboos and the removal of grass and fuel, grazing being similarly permitted.

67. In the Eastern Division a little dead wood and a few bamboos only were taken out from Hathibari.

68. In the Saugor Division the Garhakota Reserve was closed against the cutting of wood and bamboos and grazing. The grass was sold standing for Rs. 700,— a good price, considering that the greater part of the area is under wood. Here it will now be necessary to commence the cutting of inferior species for fuel, all dead wood having been cleared out. In the other reserves of this division, except to meet small local demands, there has been no cutting of green wood by purchasers; but the cutting and removal of grass and dead wood has been allowed without restriction, and grazing has been permitted, except in the blocks under protection from fire. Under the system of copsing badly grown trees, some teak was cut by Government agency in Hathko within the limits of one compartment.

69. The Pandratola Reserve has been closed, except as regards the cutting of grass and removal of dead wood; and in the Erjhar and Dhuga Reserves in Wardha, grazing has been allowed and the cutting and removal of dead wood and grass has been permitted.

70. The Departmental timber operations and their cost are exhibited in Forms No. 27 and 27A, and in the body of this report it is only necessary to refer to the most important of these operations.

71. In connection with the extraction of timber from the Banjer forests and its transport to the Goarighat Depôt, the work done is as follows:—

| | | | | |
|---|---|---|---|---|
| Carted from Kisli to Tilri, | 446 | logs, containing | 19,902 | c. ft. |
| Rafting from Tilri to Mandla, | 436 | ,, | 18,919 | ,, |
| Carting from Mandla to Sakri, | 428 | ,, | 18,567 | ,, |
| Rafting from Sakri to Goarighat, | 461 | ,, | 12,706 | ,, |
| Carting from Forest to Kisli, | 424 | ,, | 18,360 | ,, |

Cutting and collection at Forests Depot of 1,418 scantlings, 5,072 cubic feet.

The following statement exhibits the cost of these operations as compared with the expenditure in previous years:—

| Particulars. | 1874-75. | | | | 1875-76. | | | | 1876-77. | | | | 1877- | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. of logs and Cubic feet. | Rs. | A. | P. | No. of logs and Cubic feet. | Rs. | A. | P. | No. of logs and Cubic feet. | Rs. | A. | P. | No. of logs and Cubic feet. | Rs. | A. | P. |
| Carting, Forest to Kisli .. | Logs 534 containing 8,858·62 cubic feet. | | | | Logs 426 containing 12·734 cubic feet. | | | | Logs 424 containing 1,856·7 cubic feet. | | | | Logs 428 containing 18,360 cubic feet. | | | |
| Do. Kisli to Tilri | | | | | | 0 | 5 | 4 | | 0 | 3 | 2·17 | | 0 | 3 | 0·277 |
| Rafting, Tilri to Mandla.. | | 0 | 10 | 1·27 | | 0 | 3 | 1·4 | | 0 | 1 | 6·80 | | | | |
| Landing at Mandla | | | | | | | 0 | 7·2 | | 0 | 2 | 2·567 | | | | |
| Carting, Mandla to Sakri.. | | | | | | 0 | 1 | 2·5 | | 0 | 0 | 7·586 | | | | |
| Rafting, Sakri to Goari . | | 0 | 2 | 8·6 | | 0 | 2 | 2·75 | | 0 | | 11·219 | | | | |
| Landing at Goari ... | | 0 | 0 | 6·4 | | 0 | 0 | 8·20 | | | .. | ... | | | | |
| Total .. | | 0 | 13 | 4·27 | | 0 | 13 | 2·05 | | | | | | | | |

In the foregoing statement the cost of transporting scantlings has not been included, and it has to be borne in mind that the timber extracted in 1876-77 was heavier than that brought out in previous years, while it had to be carted from a greater distance.

72. As a natural consequence of the larger dimensions of the logs, the landing charges have been higher; but these charges include the cost of arrangements for landing heavy timber, which will serve the same purpose at least

for the current year. Allowing for these facts it is evident that there is a very satisfactory decrease in the cost of work. The Deputy Conservator reports that 892 scantlings, containing as nearly as possible 1·3 cubic feet each, were transported over the same distance by land and water to Goarighat for Rs. 214-9-8, or a trifle under 3 annas per cubic foot; but it remains to be seen whether large quantities can be transported at these rates. In 1875-76, 151 small logs of teak were collected from the Jagmandal forest, and these with 148 pieces collected in the past year were taken to Goarighat at a total cost per cubic foot of Rs. 0-3-9, of which fully three-fourths was on account of collection, an item which would come down considerably if large quantities were available for removal from one place. These figures are, however, chiefly useful in illustrating that this forest is far from being inaccessible, as the Inspector General of Forests during his tour in 1875-76 appeared to think. For the rafting of sal timber 1,05,000 bamboos were cut and collected at Tilri for a trifle under Rs. 8 per 1,000, thus showing a saving of Rs. 4-2-0 per 1,000 on similar work in the previous year. A small experiment was made in floating down the Gungar nala; and was so far successful, as to leave hope of this feeder of the Banjer being rendered practicable for timber transport and of water carriage being thus provided from the boundary of the Banjer forest.

73. In the Western and Pachmarhi Division the Departmental timber operations were confined to the copsing of teak, the logging and collecting of a few wind-falls, and the cutting of 100 anjun sleepers for curves on the Holkar State Railway. The first mentioned operations were the most important, and the following is a summary of the work done, the out-turn and cost :—

| Name of Reserve. | Poles. | Cost | | |
|---|---|---|---|---|
| | | Rs. | A. | P. |
| Punassa ... | 11,848 | 275 | 12 | 2 |
| Saoligarh ... | 2,383 | 118 | 11 | 9 |
| Rajaborari ... | 15,780 | 563 | 12 | 6 |
| Total ... | 30,011 | 958 | 4 | 5 |

These charges include the cost of cutting over 40,000 stumps that yielded no saleable material.

74. In the Central Division the only timber operations were the cutting and transport to Nagpur and Kamptee of 30,000 bamboos. The difficulty of procuring carriage was the cause of a larger number not being brought in.

75. In the Southern Division the following stock was brought to depôt.

| | | | | |
|---|---|---|---|---|
| Teak logs ... | 3,130 | = | 33,042 | cubic feet. |
| Hurdoo logs ... | 13 | = | 185 | ,, |
| Saj logs ... | 41 | = | 551 | ,, |
| Total ... | 3,184 | = | 33,778 | ,, |

The cost of collecting this wood at Allapilli exclusive of B. charges, was Rs. 5,890, or nearly 3 annas per cubic foot. The details of this figure are as follows :—

| | | | | | |
|---|---|---|---|---|---|
| Charges under Allia | ... | Rs. | 3,741 | 13 | 10 |
| Feed and keep of Government cattle | ... | ,, | 1,906 | 6 | 10 |
| Other charges except B. Establishment | ... | ,, | 242 | 1 | 8 |
| Total | ... | Rs. | 5,890 | 6 | 4 |

76. By the sawmills 35,636 cubic feet were turned out at a cost of Rs. 9,044, or about Rs. 0-4-0 per cubic foot. The items of which this charge is made up are as follows :—

| | | | | | |
|---|---|---|---|---|---|
| Depôt charges and cost of Establishment employed on machinery | | Rs. | 7,794 | 15 | 0 |
| Cost of Medical attendance | ... | ,, | 454 | 6 | 2 |
| Treasury guard | .. | ,, | 453 | 9 | 11 |
| Other charges, except B Establishment | ... | ,, | 341 | 4 | 8 |
| Total | ... | Rs. | 9,044 | 3 | 9 |

77. The cost of conversion was enhanced by the stoppage of the machine for repairs and re-arrangement, the impossibility, for fear of injury to the young crop, of sending carts into the reserves to extract the timber then lying in them or of working this timber out with elephants in the dry season, and delay in concluding arrangements for a supply of timber from the Zamindari. The foregoing figures regarding the cost are taken from the Deputy Conservator's report, and it is evident that they include the entire Depôt expenses, which should have been partly apportioned to receipt and despatch of timber from that depôt. Moreover, these figures include items of charge that would, under any circumstances, have to be incurred, whether the work was done by machine or hand labour, and it is therefore necessary to give separately the cost of sawing without such items. These charges may be detailed as follows :—

| | | Rs. | A | P | Rs. | A. | P. |
|---|---|---|---|---|---|---|---|
| 1. | Pay and allowance of Engineers (Native Foreman) | 408 | 3 | 6 | | | |
| 2. | Establishment employed on the Machinery | 1,419 | 0 | 1 | | | |
| 3. | Do. do. on the Timber | 982 | 15 | 1 | | | |
| 4. | Fuel | 87 | 7 | 2 | | | |
| 5. | Watering | 117 | 12 | 7 | | | |
| 6. | Oil, grease and stores for working | 401 | 13 | 2 | | | |
| 7. | Repairs, including workshop Establishment | 403 | 3 | 5 | | | |
| 8. | Contingencies | | | | | | |
| 9. | Extraordinary charges | | | | | | |
| | | Total charges | | | 3,820 | 7 | 0 |
| A. | Total current charges | ... | ... | .. | 3,820 | 7 | 0 |
| B. | Add cost of Establishment and maintenance for the mill during the recess | | ... | .. | 500 | 0 | 0 |
| C. | Add 10 per cent capital outlay on Machinery | ... | ... | . | 1,533 | 0 | 0 |
| | | Total charges | | | 5,853 | 7 | 0 |

Particulars of the work done during the year, in which the above charges were incurred, will be found in the following statement :—

| 1876-77 | Timber cut, feet. | | Feet cut. | | Outturn. | | | Current charges | | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|
| | Logs. | Cubic feet. | Running feet. | Superficial feet. | Kind and description of timber. | No. of pieces. | Cubic feet. | Rate per 100 feet. | Monthly total. | |
| From 31st April 1876 to 31st March 1877, 33 weeks and 2 days. | 4,232 | 59,535 | 1,93,519 | 2,02,661 | 1. Teak planking | 2,513 | 3,788·655 | Average rate per 100 cubic feet, Rs. 10-11-6 | Rs. | Average working time per day, 8 hours and 45 minutes, during 33 weeks and 2 days. 9 weeks and 6 days lost through repairs, break down and Sundays |
| | | | | | 2. Sleepers | 3,345 | 11,276·228 | | | |
| | | | | | 3. Scantlings between 25" and 100" cross section | 8,298 | 8,656·412 | | | |
| | | | | | 4. Beams above 100 square miles | 44 | 1,505·869 | | | |
| | | | | | 5 Boundary pillars ... | 280 | 590·800 | | | |
| | | | | | 6. Hurdu planking | 267 | 44·416 | | | |
| | | | | | 7. Teak slabs ... | 1.070 | 9,774·270 | | | |
| | | | | | | 15,817 | 35,636·650 | | 3,820.7-0 | |

It will be observed that the out-turn in material was 35,636 cubic feet, and in work 193,519 running feet, or 202,661 superficial feet; while the cost, including wear and tear of machinery was Rs. 5,853-7-0. The rates were therefore

per 100 cubic feet Rs. 16-6-9
per 100 running feet Rs.. 3-0-5
per 100 superficial feet Rs. 2-14-2..

This is nearly as expensive as hand labour, where it can be procured in sufficient quantity; but it must be remembered that, as already shown, there were during the past year numerous interruptions, and that while the machine has to be looked after throughout the year, it can only be worked for about nine months.

78. The system under which timber is transported in this division, passing through several intermediate depots before it reaches market, renders it necessary for me to refer to Statement 27 A. for an account of those operations.. The rates fixed for rafting up-stream on the Wardha and Waingunga Rivers were as follows :—

For pieces under 10 c. ft. per c. ft. per mile, $\frac{1}{10}$ pie..
For ,, over 10 c. ft. per c. ft. per mile, $\frac{2}{10}$ pie.
On sections with barriers per c. ft. per mile, $\frac{3}{10}$ pie.

When the water fell to a low level somewhat higher rates had to be paid:. The rates above quoted admit of no reduction, and it is quite possible that at no distant period they may have to be slightly raised. On both the Wardha and Waingunga floating up-stream during flood was attempted, and 251 logs were thus taken from Chichgoondi over the barriers to Kirmiri, 287 from Kirmiri to Bularpore, and 595 from Bularpore to Tulana. On the advantages of being able to work timber up-stream during flood it is needless to dilate..

79. As an experiment, a small batch of timber was taken from Allapilli to Coconada during 1876-77, and the Deputy Conservator is now going down to see to its disposal and collect information regarding the market there. This timber is debited with charges on account of custody at Coconada, which on a small batch are of course heavy; but the actual cost of transport only amounted to one anna per cubic foot. The timber of the Ahiri forest can therefore be landed at Coconada for 4 annas per cubic foot, including cost of felling, logging and collection.

80. It is necessary here to say a few words regarding the system under which produce other than that collected by Government agency is removed. The inhabitants of squatter villages within the reserves commute by the year for the supply of their wants, and no record of the quantities taken by them is kept. In the Moharli forest is in force what is known as the Kham Tahsil system, under which the produce other than prohibited kinds is cut in any open block without special permission, and is paid for, and a pass for it obtained as it leaves the forest. This system is for the present necessary in Moharli, because the people who cut and prepare the bulk of the produce for market do not export it and have not the capital to pay for it, while exporters would not resort to the forest in the same numbers if they did not find produce ready cut for them.

In the other reserves the license system is maintained, under which purchasers are required to obtain licenses for fixed quantities before they draw on the forests.

81. Deducting from Statement 27 the 33,042 cubic feet of timber obtained from private forests we have the quantity of produce collected from the reserves by Government agency, while form F exhibits the produce removed by purchasers. The quantities have not all been reduced to tons, owing to doubt that could not be removed without reference and delay regarding the dimensions of some of the pieces removed from Moharli, which moreover have been so varied as to render calculation of the number of tons complicated.

Works for opening up the forests and rendering them more accessible.

82. These are closely allied with the working of the forests, and this therefore is the most appropriate place for referring to them. In the Western Division one river-crossing 200 feet long, and one fair weather road 2½ miles in length were made to render accessible parts of the forest in which produce was available for sale. These works, however, call for no remark, beyond that they were so judiciously laid out, as to cost only the nominal sum of Rs. 14. The most important work and the only other to be referred to is the improvement of passages in the Banjer river, by which the timber of the Banjer forest has to be extracted. This work was not completed till after the close of the year, but the entire expenditure on it, exclusive of the cost of supervision and direction chargeable to B, is given in the following statement:—

| Section. | Rapid No. | Name of Dhar. | Pay of coolies. | | | Miscellaneous. | | | Cost of tools. | | | Total of each section. | | | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Rs. | A. | P. | Rs. | A. | P. | Rs. | A. | P. | Rs. | A. | P. | |
| I | 1 | Mocha Dhar ... | 244 | 12 | 0 | 194 | 7 | 5 | 75 | 6 | 8 | 738 | 3 | 7 | Rupees 1,517-11-8 has been expended in accounts for 1876-77 and Rs. 467-14-1 in accounts for April 1877. |
| | 2 | ... | 17 | 7 | 0 | | | | | | | | | | |
| | 3 | ... | 206 | 2 | 6 | | | | | | | | | | |
| II | 1 | Rain Dhar ... | 115 | 4 | 6 | 340 | 5 | 0 | 131 | 15 | 8 | 1,247 | 6 | 2 | |
| | 2 | Luthri Dhar ... | 196 | 9 | 0 | | | | | | | | | | |
| | 3 | Dukri Dhar ... | 254 | 6 | 3 | | | | | | | | | | |
| | 4 | Kanhar Dhar ... | 155 | 8 | 3 | | | | | | | | | | |
| | 5 | Bailer Dhar ... | 53 | 5 | 6 | | | | | | | | | | |
| | | Total ... | 1,243 | 7 | 0 | 534 | 12 | 5 | 207 | 6 | 4 | 1,985 | 9 | 9 | |

From the Mocha Dhar 22,000 cubic feet, and from the Dukri Dhar 12,140 cubic feet of stone were removed at a cost of from Rs. 3-5-0 to Rs. 3-6-0 per 100 cubic feet. The quantities removed from the other rapids are not given, and they would probably have been difficult to calculate. At the Mocha Dhar a small piece of work remains to be done, the cost of which is estimated at Rs. 100, and it is possible that after the next rafting season some trifling improvements will be found practicable, but the cost of such improvements should be comparatively trifling. The opening up of the Banjer to Mocha will reduce the land carriage between the forest and rafting depot by 3 miles. A complete examination of the Gungar nala will now be made, and if it is found possible to render this stream practicable and reliable for timber transport, estimates for the work, as also for opening up the Banjer between its junction with the Gungar and Mocha, will be prepared.

## Head II.

### *Unreserved or District Forests.*

83. The area of the Unreserved forests is given in Statement B. The total area amounts to 16,444 square miles and 311 acres, as compared with 16,510 square miles and 491 acres, which was the area at the close of 1875-76. The area added during the year was 8 square miles and 410 acres. The resumption of clearance leases caused an addition of 438 acres in Balaghat, 314 acres in Saugor, 2 square miles and 39 acres in Chhindwara, and 575 acres in Nimar. In Mandla 4 square miles and 324 acres were added, but this increase is not accounted for in the district report. The area excluded or transferred to other heads during the year was 74 square miles and 590 acres. In Balaghat 12 square miles and 36 acres formed the area of fourteen villages settled in proprietary right, while in Nimar 4 square miles and 328 acres passed from the hands of Government, owing to a right having been acquired in the land by the lessees. In Chanda 58 square miles and 226 acres were transferred to the Moharli Reserve.

84. There has been a decrease in the number of prosecutions, which amount in the past year to 377 involving 769 persons, of whom 600 were convicted and punished. The principal decrease has occurred in the districts of Chanda, Seoni, Mandla, Betul, and Narsinghpur. In Seoni it would appear that in many cases the custom of levying double duty was preferred to prosecuting the delinquents, and this would doubtless account for a portion of the decrease in the other districts; while the usual result of a large number of prosecutions in one year is a diminution in the number of cases during the succeeding year. There has been an increase in prosecutions in Hoshangabad, Raipur and Jubbulpore, for which no special reasons have been assigned in the annual reports; but the Deputy Commissioner of Hoshangabad is of opinion that some of the prosecutions in his district were not in all cases well considered.

85. In the reports for previous years the charges against the unreserved forests have been exhibited in lump sums under each budget head, but this year they are with the revenue given separately in Form No. 21 (Summary of Revenue and Expenditure); while for reference and comparison a statement of the receipts and charges for the past 5 years will be given after the remarks on each district.

86. The system of managment introduced by Colonel Lucie Smith, while in charge of the Nagpur District, has continued in force; and in reporting on the District Forest administration for the past year, the Deputy Commissioner remarks that the loss of revenue which has resulted under this system has been compensated for by the stricter conservation secured by it; and goes on to remark that previously capital had been intrenched upon, while now the interest only is used. Its advantages however are, in my opinion, more imaginary than real; though requiring people to obtain licenses before cutting certain kinds of wood may have tended to check consumption.

Nagpur.

87. The system referred to may be thus briefly described. Inclusive of the trees generally reserved by the Forest rules, 14 kinds of trees are treated as reserved species, and were not permitted to be cut without the sanction of the Deputy Commissioner. In the larger and more productive forest tracts the cutting of 37 other species is prohibited, except under license obtained from recognized forest license vendors nominated by the district officer. In these forests the right to levy grazing dues, and to take duty on all other wood or minor products removed from them, except such as was taken under commutation hereafter referred to, is leased to a contractor. In the detached and inferior forest tracts the right to take grazing dues and to levy duty on all produce except the 14 reserved kinds of woods is leased, or in other words, the ordinary leasing system is in force. Forest villagers are permitted to commute, the rate to be paid by them being fixed on an estimate of their requirements. It will thus be seen that in the larger and more productive forest tracts no less than three different systems are in operation at the same time, viz: the contract system, the license system, and commutation.

88. To commutation to the extent, and under the circumstances herein referred to, no objection can be raised; but it is absurd to maintain, as is necessary under the license system referred to, an establishment, limited though it may be, to control the more important produce removed and to lease the right to take duty on all other produce, for the establishment that could do the one work efficiently should be able to check all produce removed, and the collection of dues thereon could be arranged for in a manner similar to that in force for the sale of licenses at present in force.

89. As regards reserved woods, it is feared that the term has no meaning here, beyond that they may not be cut without the permission of the district officer. To what extent this is the case I am not prepared to state; but it is certain that as regards teak, the most valuable species, cutting has been so far without reservation, that the northern forests of the district are no longer capable of yielding teak poles, and it will probably be some years before revenue can again be expected from this source.

90. A revised system of management is under consideration, but the matter could not be taken up till too late to make changes this year. The cutting of teak has of necessity been stopped, and the demand for wood of the other reserved kinds will be carefully watched.

The receipts for 1876-77 amounted to Rs. 15,345-15-2 or Rs. 460 less than in the previous year. Though the revenue from teak may have to be foregone for some time, there is reason to hope that with improved organization and management the receipts will increase.

91. The revenue of the past year would have been higher if a reasonable price had been put on the teak poles cut and disposed of.

The following is a comparative statement of receipts and charges for the past 5 years:—

| Year ... | 1872-73 | 1873-74 | 1874-75 | 1875-76 | 1876-77 |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. |
| Receipts .. ... | 19,878 | 21,353 | 12,243 | 15,805 | 15,346 |
| Charges .. ... | 993 | 4,092 | 3,697 | 3,998 | 4,056 |
| Surplus ... | 18,885 | 17,261 | 8,546 | 11,807 | 11,290 |

Bhandara.

92. Commutation remains in force in this district, produce exported being removed under the Kham Tahsil system. The Deputy Commissioner adverts to it as being extremely wasteful, and it would not be reasonable to expect that economy would be practised when there is nothing to gain by it. Wherever the capabilities of the forests fall short of the demand on them it should be abandoned in favour of some method that will admit of the systematic management of the forests. In such cases some good may result from making people pay on the produce taken, but wherever the maintenance of a permanent supply is desired something more is necessary, the first step towards which is the selection and demarcation of reserves. It is, however, feared that it will not be possible for one or two years to take any definite action in this matter in the Bhandara District.

93. The fear of causing inconvenience to the people has hitherto been the stumbling block to improvement in Bhandara, but it seems probable that if the best of the more accessible forests were reserved and small portions of them only taken in hand at a time, for improvement until they were thoroughly stocked, much good would result, without any inconvenience being experienced by the people, and this is the course that I am disposed to recommend.

94. The receipts in 1876-77 amounted to Rs. 33,208 against Rs. 36,487 in the previous year. The decrease is mainly due to an out-break of cholera and unseasonable rain, which stopped cart traffic, and caused the receipts on wood exported to be Rs. 1,376 less than in 1875-76, and to delay in getting in the amounts due under the commutation system; the receipts would otherwise have been higher than in the previous year.

The amount derived from commutation was Rs. 18,096, of which Rs. 7,010 remained uncollected at the close of the year: the commuting population is represented by 69,387 houses or 317,365 souls.

The following is a comparative statement of receipts and charges for the past 5 years:—

| Year ... | 1872-73. | 1873-74. | 1874-75. | 1875-76. | 1876-77. |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. |
| Receipts ... ... | 29,766 | 31,461 | 29,467 | 36,487 | 33,208 |
| Charges ... ... | 1,628 | 2,138 | 2,441 | 2,968 | 2,845 |
| Surplus ... | 28,138 | 29,323 | 27,026 | 33,519 | 30,363 |

Chanda.

95. As in the previous year the inhabitants of the district have been allowed to commute for their own requirements; while produce taken for sale or export is removed under the license system. Under the commutation system, with the exception hereafter mentioned, the Malguzar pays to Government at the rate of 2 annas per house, the rate being supposed to cover all forest produce for the use of his village, and thereby acquires the right to take duty at the rate of 2 annas per cart load on building wood and bamboos only brought into his village from the Government forest and to supply his own wants. The exceptions referred to are Chanda, and Warora, where the commutation rate is 4 annas per house, the Municipality which commutes for Chanda, and the Malguzar of Warora, being allowed to take duty on grass and firewood also at the rate of 2 annas per cart load, and 16 villages in the more prosperous parts of the district where the rates were raised to 4 annas per house, the Malguzar being allowed to take on building

wood and bamboos 3 annas and on grass and fuel 1½ anna per cart load. In 7 of these villages the Malguzars did not take up the collection of the dues, and arrangements were accordingly made direct with the people.

96. Three blocks of forest comprising an area of 109 square miles were closed against all cutting. Though not distinctly specified in the report, these must be the Gunpur forests recently examined by an Officer of the Department and highly spoken of by the Inspector General of Forests, who marched through them on his way to Ahiri. This is a step in the right direction, for these forests will sooner or later be excessively valuable. Their reservation is advocated by by the District officer, and a special report regarding them will in due course be submitted for the Chief Commissioner's information.

97. The receipts have amounted to Rs. 26,137 against Rs. 23,059 in the previous year. Of the increase of Rs. 3,078, about Rs. 2,000 results from the higher rates of commutation in Chanda, Warora, and the 16 villages already referred to; while nearly Rs. 600 is from an increase in the quantity of produce taken for sale, the total receipts from which source amounted to Rs. 8,274 against Rs. 7,688 in the previous year, which is satisfactory, considering that 109 square miles were closed and 58 square miles of forest transferred to the Moharli reserve. As in Bhandara and elsewhere, the unseasonable rains in the cold and hot months has told very considerably against the development of the revenue from this source.

98. It will, I believe, ere long be found that though greatly approved of by the Malguzars, the present system of commutation in Chanda is not so thoroughly popular as has hitherto been supposed. Moreover, as is illustrated by the following figures for Chanda and Warora, where the recognized rates could scarcely be exceeded, it must result in a considerable sacrifice of revenue:—

*Chanda.*

| | | | | | |
|---|---|---|---|---|---|
| Assessment at 4 annas per house | ... | Rs. | 1,217 | 8 | 0 |
| Receipts for 9 months | ... | ,, | 1,411 | 14 | 0 |
| Profit | ... | Rs. | 194 | 6 | 0 |

*Warora.*

| | | | | | |
|---|---|---|---|---|---|
| Assessment | ... | Rs. | 251 | 0 | 0 |
| Receipts in 9 months | ... | ,, | 316 | 9 | 0 |
| Profit | ... | Rs. | 65 | 9 | 0 |

In both these cases the receipts for April, May and June, the most profitable months of the year, are excluded; and it therefore seems probable that the receipts for a whole year will be double the amount of the assessment. The Deputy Commissioner records an instance before him while writing his report in which a Malguzar claimed as much as Rs. 30 from 3 kersans, in whose account he had only paid 6 annas to Government.

The following is a comparative statement of receipts and charges for the past 5 years:—

| | 1872-73. | 1873-74. | 1874-75. | 1875-76. | 1876-77. |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. |
| Receipts ... | 26,350 | 22,572 | 21,772 | 23,059 | 26,137 |
| Charges ... | 1,321 | 1,152 | 1,760 | 3,173 | 3,709 |
| Surplus ... | 25,029 | 21,420 | 20,012 | 19,886 | 22,428 |

Wardha.

99. Regarding Forest administration in Wardha there is very little to be said. The greater part of the district derives its supplies of the more valuable produce from the local bazars to which produce is brought for sale, or is imported by the inhabitants for their own use. The produce taken from the forests of the district, with the exception of a few teak poles, consists of small poles, grass and firewood and inferior material.

100. The license system has continued in force during the year under report, Malguzars being employed as license vendors, and a special establishment being maintained to check the produce removed.

The receipts amounted to Rs. 10,494 against Rs. 10,145 in the previous year.

101. The Deputy Commissioner, Colonel Waddington, deprecated the present system, and advocated commutation; but I am of opinion that any improvement should be not in change of system, but in rendering the present system more efficient. The most effectual way of doing this is by giving to the licenses a fixed money value before placing them in the hands of the license vendors; and it seems quite possible that such a change might be attended with increased receipts.

The following is a comparative statement of receipts and charges for the past 5 years:—

| | 1872-73. | 1873-74. | 1874-75. | 1875-76. | 1876-77. |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. |
| Receipts ... | 7,166 | 9,107 | 8,525 | 10,145 | 10,494 |
| Charges ... | 860 | 3,447 | 3,616 | 4,084 | 4,152 |
| Surplus ... | 6,306 | 5,660 | 4,909 | 6,061 | 6,342 |

Balaghat.

102. There has been no change in the system of management which is partly commutation and partly the license system.

The Bichia and Gadaghat forest, with an area of 8,046 acres, have continued closed against cutting; and the Balkheri, Lawagri and Mawalgondi forests have been closed, the removal of grass, dry wood, small bamboos and minor produce only being permitted.

The cutting of Katang bamboos where they exist has, for the present, been prohibited, the crop being as yet young.

Smelters of iron have been required to obtain special license from the Deputy Commissioner before using the produce of the Government forests for smelting purposes. They have been required to pay Rs. 1 per furnace per mensem, and the District Officer thinks the rate should be raised.

103. It would appear from special correspondence on the subject that the unreserved forests in parts of Katangi and Karela have been so far worked out, as to render it impossible for the people to supply their wants in forest produce, except from the Satpura reserve. This resulted in a proposal that nearly the entire block of the Sonawani forests comprising the eastern portion of the Satpura reserve, on the conservation of which the state has for over 10 years incurred a steady annual outlay, should be struck off from the reserved forests and thrown open to commutation. The grounds given for this proposition were that the tract produced no sal and not much teak, and hence could not be of much value as a reserve, that the following rates levied by the Forest Department were excessive, and that the restrictions which conservation necessitated in the reserve were too irksome to the people. The question resolved itself into whether the present population should submitt to forest conservation, and have the prospect of a permanent supply of produce to meet their wants, or be allowed unrestricted access to the forests, and so to put an end to all hope of the maintenance of a constant supply of produce from these tracts. The Chief Commissioner having decided in favour of the former course, the Sonawani forests will remain part of the Satpura reserve, and the expenditure already incurred will not be thrown away.

104. As regards the rates current in the reserves which were considered excessive, it is well here to give a comparative statement of the rates current in the reserve and those charged on produce removed on licenses from the unreserved forests of Balaghat, which are as follows:—

| | Satpura reserve rates. | | | Unreserved forest rates. | |
|---|---|---|---|---|---|
| Bullies per 100... | Rs. | 12-8-0=about 1 per cart. | | Rs. 1-0-0 per cart-load. | |
| Kakurs ... | ,, | 6-0-0 | do. | ,, 1-0-0 | do. |
| Bamboos per 100. | ,, | 0-8-0 | do. | ,, 0-8-0 per 100. | |
| Grass per cart ... | ,, | 0-2-0 | do. | ,, 0-2-0 per cart-load. | |
| Fuel per cart ... | ,, | 0-2-0 | do. | ,, 0-2-0 | do. |

The figures speak for themselves, and render any remark regarding rates unnecessary.

105. The revenue in 1876-77 was Rs. 25,748 against Rs. 26,123 in the previous year. The small decrease calls for no special remark.

The following is a comparative statement of receipts and charges for the past 5 years :—

| | 1872-73. | 1873-74. | 1874-75. | 1875-76. | 1876-77. |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. |
| Receipts ... | 21,723 | 21,293 | 22,587 | 26,163 | 25,749 |
| Charges ... | 3,276 | 4,302 | 4,691 | 5,193 | 5,196 |
| Surplus ... | 18,447 | 16,991 | 17,896 | 20,970 | 20,553 |

Sironcha.

106. In the Sironcha district the commutation system is in force, and is reported by the Deputy Commissioner to be well suited to local requirements.

107. The receipts amounted to Rs. 6,137 against Rs. 12,163 in the previous year. The decrease, it is said, is due to less timber having been got ready and sent to market.

The following is a comparative statement of receipts and charges for the past 5 years :—

| | 1872-73. | 1873-74. | 1874-75. | 1875-76. | 1876-77. |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. |
| Receipts ... | 12,642 | 38,521 | 3,037 | 12,134 | 6,173 |
| Charges ... | 3,483 | 3,710 | 2,494 | 1,504 | 1,313 |
| Surplus ... | 9,159 | 34,811 | 543 | 10,630 | 4,860 |

Jubbulpore.

108. The Nimar system has continued in force in this district. The receipts have amounted to Rs. 16,443 against Rs. 18,169 realized in the previous year, thus giving a net decrease of Rs. 1,726. Under the different heads of revenue there have been fluctuations, but the chief decrease is on account of wood taken for sale in towns; and it seems quite possible that unseasonable rain may be the cause of this, not only by temporarily stopping traffic, but by admitting of more produce from the Seoni forests finding its way to market by river. It is known that fuel was for the first time taken from the Seoni forests on the Nerbudda to Jubbulpore.

109. From the district report it is not clear that protection against cutting has been continued to the 7 blocks closed in 1874-75, but it would appear that 14 blocks with an area of 12,117 acres were closed against cutting during the year under report.

The following is a comparative statement of receipts and charges for the past 5 years:—

| | 1872-73. | 1873-74 | 1874-75. | 1875-76. | 1876 77. |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. |
| Receipts ... | 24,155 | 17,842 | 19,836 | 18,169 | 16,443 |
| Charges ... | 153 | 1,806 | 2,889 | 2,396 | 1,679 |
| Surplus ... | 24,002 | 16,036 | 16,927 | 15,773 | 14,764 |

Saugor,

110. In the Saugor district there has been no change in system, though there have been one or two trifling modifications in matters of detail; commutation has been applicable to the interior of the district; duty on produce brought into 5 municipal towns has been levied on the kham tehsil system, payment being taken at the octroi posts; in certain tracts the license system has been in force, while the right to collect or levy dues on minor forest produce has been leased,

111. In the south-eastern portion of the district it has been proposed to abandon commutation in favour of some new arrangement said to be adapted to circumstances in that part of the district, but the details of which are not at present known to me, and this change has, I understand, been sanctioned by the Chief Commissioner. Whether this change will be attended with any immediate increase of revenue is as yet uncertain, but it is hoped that it will afford some protection to the forests,

| *Name.* | *Area in acres.* |
|---|---|
| Juna ... ... | 2,765 |
| Tinsi ... ... | 1,950 |
| Jamrasi ... | 2,256 |
| Bichea .. ... | 2,619 |
| Bijni ... .. | 1,290 |
| Ramkheri . ... | 2,024 |
| Hurrakhera . | 370 |
| Papra . ... | 979 |
| Chind ... ... | 2,026 |
| Khapa . ... | 1,835 |
| Harikut ... | 3,765 |
| Bhanda ... ... | 1,130 |
| Holu ... .. | 1,909 |
| Chourka .. . | 2,289 |
| Amapani ... ... | 7,639 |
| Dhana ... . | 1,353 |
| Bandra .. ... | 1,378 |
| Sarra ... ... | 858 |
| Total ... | 38,435 |

112. During the year under report the 18 blocks as per margin referred to in paragraph 48 of last year's report remained closed against cutting. They are situated just north of the Nerbudda, and are convenient for the supply of wood, fuel, and bamboos to the Narsinghpur District,

113. At the suggestion of Major Loch, the Shahgarh forests were examined by the Assistant Conservator, Mr. Foster, and a report with proposals for their reservation submitted. The expense which these proposals would entail, and the uncertainty of the financial results has for the present deterred me from forwarding them for the Chief Commissioner's consideration. It would appear that these forests are in a very poor condition, which is chiefly due to iron smelting, which in some places has resulted in extensive clearances. The reduction in English prices, has however, given a check to local manufacture, and the matter is for the present of less pressing importance than it at first appeared,

114. One remarkable feature in the Saugor district forests, is a small plot of about 100 acres in which sandal wood is now naturalized.* The best portion of the sandal wood is, however, on land which is not the property of Government. It is situated about 30 miles east of Saugor; and though the wood is not particularly good, the tract, small as it is, will probably be worth reservation and protection. Green sandal wood though of inferior quality commands a price quite equal to that of the wood brought to Mysore, hence the value of local production within certain limits.

115. Some interesting statistics regarding the rate of consumption of forest produce in the chief town of Saugor have been furnished by Major Loch, and will hereafter be useful.

116. The receipts amounted to Rs. 34,009 against Rs. 34,738 in the previous year. The decrease is attributed to 14 villages having withdrawn from commutation against 7 new villages that commuted; to the decrease in the quantity of fuel brought into municiqal towns by the cart load at 2 annas per load, it being found cheaqer to import by the head-load, which pays duty at 1 pie per load; and to the exemption from duty of head-loads of grass brought into Deori and Korai, it being found that the Government forests were too distant to admit of grass being brought from them by the head-load.

The following is a comparative statement of receipts and charges for the past 5 years:—

| | 1872-73. | 1873-74. | 1874-75. | 1875-76. | 1876 77. |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. |
| Receipts .. | 23,364 | 26,779 | 43,726 | 34,738 | 34,009 |
| Charges .. | 1,233 | 3,023 | 4,673 | 4,065 | 3,961 |
| Surplus | 22,131 | 23,740 | 39,053 | 30,673 | 30,048 |

117. During the past two years various changes have been going on in the system of management in Damoh, an account of which and their success will be found in the following extracts from Colonel Thompson's report:—

Damoh.

"I now proceed to notice the different heads in detail. I take the item of grazing due first, as it yields the highest income. These dues are obtained partly from the people of this district, and partly from the people of the surrounding districts of Jubbulpore, Narsinghpur and Saugor; and the native states in the north, all of whom use the extensive forests of this district.

"Formerly the dues were collected from the people of other districts in the forest. In July or August, when it was supposed that the mass of the cattle had come into the grazing grounds, the Forest Darogah, or some Tahsili officials, went through the forests counting the herds, and making lists by herds or sheds, according to which dues were collected. In the case of the people of this district they were assessed in a kind of commutation, which was fixed summarily for each village, and realized from the Malguzars; who distributed it over the villagers much as they pleased. For this payment the people were entitled to graze their cattle, and also to cut wood, almost unrestrictedly. A part then of this commutation payment must be considered to have been grazing dues.

"The counting system allowed of such wholesale evasion of dues by the removal of herds, just before the arrival of the counting officer &c., and it was so utterly impossible to check the work of the counters, that it was abandoned. It was also found necessary in the case of the people of this district, to separate the grazing dues from those on wood. A completely revised arrangement was then required, and I introduced a system of licenses for people outside the district, who were required to produce licenses for the cattle they brought, without which they were not allowed into the forest, and I assessed the people of the district on lists of their cattle drawn up by the Patwaris. To save the people the payment in advance, I arranged for the payment of the lump assessed on the village through the Malguzars at the end of the season.

"These arrangements were an improvement on the old system. They secured us a greatly increased income. But the establishment, though it had been increased, was shown to be still insufficient for the watch and control of the extended border on the south and west of the district. The Patwaris' lists also were not liked, and their correctness was impugned by the graziers. The Patwaris also complained of the trouble their preparation entailed.

"Under these circumstances no course seemed open to us, but to introduce the license system for the people of this district also; and I put it in force, getting a quantity of printed licenses and placing them with the Chief constables of Police and Patwaries, to whom I allowed 2 per cent. on the value of all they disposed of. The rates of the dues being very low indeed, I at the same time raised them as detailed in the margin. These arrangements have been in force during the year under report.

Rates per cent.

| | 1875-76. | | | 1876-77 | | |
|---|---|---|---|---|---|---|
| | Rs. | a. | p. | Rs. | a. | p. |
| Cows and Bullocks ... | 6 | 4 | 0 | 10 | 0 | 0 |
| Buffaloes | 9 | 6 | 0 | 12 | 8 | 0 |
| Calves | 3 | 2 | 0 | 4 | 11 | 0 |
| Sheep and Goats | 3 | 2 | 0 | 3 | 2 | 0 |

"The returns show that from a financial point of view the system has been a success, the income having risen from Rs. 11,281 to Rs. 15,599, or by Rs. 4,318.

"An examination of the figures shows that this increase is almost entirely the result of the increased rates of the dues, and has not accrued from an increased number of cattle having been brought under assessment. The unexpected result has been brought about by the want of an establishment sufficient to watch and control the northern forests, and those in the interior of the district. Had I had the establishment I asked for, the unlicensed use of these forests would have been checked, and we should have had a considerably increased number of cattle brought under taxation; but the sanction was not conveyed to me till the 13th October 1876, *vide* letter No. D.—369, dated 9th October 1876.

"The establishment was not in working order till the end of October 1876, by which time a large proportion of the cattle had left the forests. Out of the small proportion remaining several unlicensed herds were detected; but the greater part had left before the establishment entered the forest.

"With the establishment now in charge, and the addition to it which I have just asked for, which may I trust be sanctioned earlier this year, this kind of evasion will not be possible, and I hope to see a larger number of cattle brought under taxation during the current year.

Dues on wood."

"These dues, like the grazing dues, are obtained from the people of this and the surrounding districts, who draw their supplies of wood for building and agricultural purposes from the extensive forests of this district.

"Formerly they were levied from the people of this district in the form of a kind of commutation, a very small lump sum being assessed on each of the villages. This was realized from the malguzars, who spread it over the villagers, charging each man according to his means, requirements &c. For this payment the people were allowed to cut wood unrestrictedly even for sale, and in many cases were also allowed to graze their cattle. The people from the outside districts were supposed

to pay on entering or leaving the forests. But the posts for collection of dues were maintained only 3 months in the year, and were so few and far between, that it was quite easy to avoid them, and to evade payment ; but few then of the users paid dues, and the amount for the whole district did not exceed Rs. 3,00 a year.

" This system was shown to be not only unremunerative but most injurious to the forests, which were hacked about in the most reckless and wasteful manner, and indeed in parts almost obliterated. A change was then much called for, and I arranged a detailed commutation for the people of this district, which was assessed for agriculturists by rates on ploughs, and for non-agriculturists according to their means and profession. I also increased the number of posts on the border of forests so as to check the unpaid use of the forest by outsiders, keeping them up all the year round.

" This modified system yielded a greatly increased income, but it was shown to be faulty in many ways. The commutation system was open to many objections. It encouraged the reckless cutting and destruction of the forests ; and I found it almost impossible to check its abuse by the people who chose to cut wood for sale. There was also a difficulty in preventing non-commuters using the forest. It was shown in several cases that the villagers perceiving this had got their names struck off the commutation list, and had deliberately cut wood without payment. It was also shown that the establishment was still in many parts too small to check the unpaid use of the forest.

" Bearing this in mind, and seeing the success of the license system in connection with grazing dues, I introduced it for all outsiders (people from other districts) wishing to supply themselves with wood from our forests, I also required commuters to take out licenses, so as to check the use of the forests by non-commuters. This was at the commencement of the year 1876-77. At the same time I arranged to enhance the rates of dues as shown in the margin ; and the rates prevailing were very low compared with those levied in other districts, and it was desirable to raise them so as to check the very reckless cutting which had obtained. I also asked for an increased establishment as detailed in the margin to enable me to watch the borders and also the very large forests of the interior which I have divided into circles.

| | Former rate per cart. | Present rate. per cart. |
|---|---|---|
| Timber ... | 0--8-0 | 0-12-0 |
| Wood ... | 0--2-0 | 0-4-0 |
| Bamboos .. | 0-12-0 | 1-0-0 |
| Charcoal ... | 1--0-0 | 1-0-0 |

| Strength. | | |
|---|---|---|
| 1876-77 ... | 74 | The whole Establishment. |
| 1877-78 ... | 108 | |

As follows—

| 1876-77. | | | 1877-78. | | |
|---|---|---|---|---|---|
| No. | Designation. | Pay. | No. | Designation. | Pay. |
| | | Rs. | | | Rs. |
| 1 | Dafadar ... | 25 | 1 | Dafadar ... | 25 |
| 1 | do. | 15 | 1 | do. ... | 15 |
| 5 | do. at Rs. 10 each ... | 50 | 5 | do. at Rs. 10 each ... | 50 |
| 1 | Moharir ... | 15 | 2 | Moharirs at Rs. 15 each. | 30 |
| 1 | do. ... | 10 | 4 | do. at Rs. 10 each ... | 40 |
| 8 | do. at Rs. 8 each ... | 64 | 8 | do. at Rs. 8 each ... | 64 |
| 3 | do. at Rs. 7 each ... | 21 | 3 | do. at Rs. 7 each .. | 21 |
| 1 | do. at Rs. 6 each ... | 6 | 1 | do. at Rs. 6 each ... | 6 |
| 5 | Chaprasees at Rs. 6 each. | 30 | 5 | Chaprassees at Rs. 6 each | 30 |
| 48 | do. at Rs. 5 each ... | 240 | 78 | do. at Rs. 5 each ... | 390 |
| 74 | | 476 | 108 | Increase of Rs. 195 per per mensem. | 671 |

" The returns show that from a financial point of view the arrangement has been a success, the income being nearly double that of the previous year. An examination of the figures, however, shows that here also, as in the case of grazing dues, this increase is almost all of it, due to the enhanced rates, and that the number of people brought under assessment has not increased.

" This result is due in the first place, to the want of the increased establishment ; (which was not sanctioned till October 1876) which prevented our checking the unpaid use of many of the forests, especially those in the north. We obtained information about this after the extra establishment was located, but could not get evidence

sufficient to prosecute. In the 2nd place, it appears to have been due to our having stopped the commuters cutting wood for sale. This we were obliged to do, as they would not pay extra for cutting for sale, and the consequence was that the people from the open country requiring wood, had to cut it for themselves, and were in consequence unable to carry as much as they usually did when they found it ready cut. The amount of wood cut is then if anything smaller than in the previous year, and the increased income is due to increased rates.

"' To obviate this difficulty I propose to charge people cutting for sale a certain sum per axe. In this way the Gonds, and others of the labouring classes residing in the villages adjoining the forest, will be enabled to carry on the wood cutting, which has always formed one of their means of living and is remunerative; whilst the purchasers will secure the larger supply which they could not cut for themselves; and at the same time another item of income will be formed, the purchasers paying their dues at the posts on the border as heretofore.'"

"' This system, which, as shown above, has been applied to the collection of both grazing and wood dues, has worked fairly well. There have been no well founded complaints about difficulties in obtaining licenses, except from Saugor and Narsinghpur, where no special Moharirs were appointed to distribute the licenses, and where it seems to have been no one's duty to distribute them. People came here from those districts and asked for licenses, saying that they had failed to get them at the Tahsilis, that it seemed to be no ones work to give them out. In Jubbulpore, where Major Ward asked for a special Moharir for the work it seems to have been well done. The people did not complain of having had difficulty in securing licenses, and a great number were taken out and used."

The license system.

118. Below the bund of the old Kishan Talao, where Government waste land as available at a short distance from the station of Damoh, bamboo planting on a small scale was attempted, and has been found successful. A quantity of seed of forest trees was also sown with fair results, but the area stocked is not given. The expediency of extending these planting operations to supply the station of Damoh and people residing in the vicinity has been urged by the District Officer; but before incurring heavy expenditure it is necessary that a return for the outlay in the future should be made certain, by putting the areas on the footing of reserves.

119. Colonel Thompson's efforts for the suppression of fire in the forest of his district appear to have been attended with some success. I cannot but think however that under existing circumstances wholesale attempts at keeping out fires are a waste of valuable energy.

Probably more good would result if the efforts in this direction were concentrated on limited areas, carefully selected with reference to their capability and the demand.

120. The reservation of a large tract of forest adjoining the Singrampur Reserve has been suggested, but the expediency of this measure has not yet been fully considered. Proposals for rendering some of the Government forest tracts more compact by exchange of land are also said to have been submitted to the Commissioner.

121. There is again a considerable increase in the revenue, which stood at Rs. 32,559 against Rs. 27,619 in the previous year. This increase was found on investigation to be due to enhanced rates, and not to duty being levied on a greater amount of produce. Probably if the establishment had been sufficient, duty would have been paid on a larger quantity of produce, and now that the establishment has been raised to the strength proposed by Colonel Thompson there is reason to hope that there, will be a still further increase of revenue.

The following is a comparative statement of receipts and charges for the past 5 years.

| | 1872-73. | 1873-74. | 1874-75. | 1875-76. | 1876-77 |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. |
| Receipts ... ... | 12,615 | 25,883 | 25,136 | 27,620 | 32,559 |
| Charges . ... | 604 | 2,396 | 2,912 | 3,660 | 5,548 |
| Surplus ... ... | 12,011 | 23,487 | 22 224 | 23,960 | 27,011 |

Seoni.

122. The system in force and the tracts to which they apply are detailed, in the following extract from the district report.

" SEONI TAHSIL.

" Commutation as far as the jungles of Oosree, Dullal Kunjai, Mohbilee and Kot Kussa are concerned.

*1 Puchdhar. 2. Paraspani. 3. Silaree. 4 Khawasa. 5. Bagal Pindrai 6. Cheechuldoh.

" The license system as regards the forests south of the Satpuras, which are worked in 6* blocks in rotation, Cheechuldoh and Pindrai having been kept open during the past year.

1. Lamajotee. 2. Gidkoha. 3. Pailee. 4. Ghanamow.

" The license system with rotation for the 4+ blocks on the south-west of Seoni, Pailee block having been opened during the past year.

" The license system as regards the Ooglee jungles and those of Oolut Bahrye."

LAKNADON TAHSIL.

" Commutation in 732 villages.

" Retaining closed the Nahurgur jungles, 400 acres."

123. The continuance of the license system in the Oogly forests has proved satisfactory, the receipts having risen to Rs. 3,185 against Rs. 2,566 in the previous year and Rs. 1,885 in 1874-75. Here the desire to revert to commutation has died out, the people having become accustomed to the system in force. The commutation rates are, 1st for cultivators 4 to 8 annas, according to the number of cattle used. 2nd. For non-cultivators 2 to 3 annas per house, according to probable requirements.

The assessment is made by the Tahsildar subject to confirmation of the Deputy Commissioner, and the revenue is collected and paid in by the malguzars, who receive half an anna in the rupee as commission.

124. The rates for cultivators given above practically cover all forest produce required by the commuters, grazing and wood over 2 feet in girth only being charged for separately. The rate for non-cultivators covers fuel, thatching grass, leaves, buckle and fencing material, all other produce has to be paid for separately

Major Lugard is not in favour of the commutation system, and proposes to modify it by fixing the quantities of the different classes of produce that may be taken by each individual during the year.

125. It is evident that 5 out of the 6 blocks south of the Satpura Reserve, and 3 out of 4 blocks to the south-west of Seoni which are supposed to be worked in rotation were closed during the year, but the fact is only casually adverted to in the district report.

126. The propagation of lac by Government agency has been attempted in three places, in one of which it is said to be doing well. The past season was favourable for the cold season evolution, and therefore if the insects were alive in any numbers at that time they should do well. Propagation in the leased jungle of Durasi is said to be going on well.

127. The revenue amounted to Rs. 52,771 against Rs. 34,757 in the previous year; but it appears that of the realizations in 1876-77 Rs. 10,338 were recoveries of outstandings from the previous year. To exhibit therefore the true results this amount must be deducted from the receipts of the year under review and added to those of the previous year, which gives the following figures :—

| | | |
|---|---|---|
| 1875-76 | ... | Rs. 45,095 |
| 1876-77 | ... | Rs. 42,433 |
| | Difference ... | 2,662 |
| Deduct outstanding at close of year | ... | 162 |
| | | 2,500 |

This result does not correspond with that shown in the district report, in which some error appears to have occurred.

The following is a comparative statement of receipts and charges for the past 5 years. :—

| | 1872-73. | 1873-74. | 1874-75. | 1875-76. | 1876-77. |
|---|---|---|---|---|---|
| | Rs. | Rs | Rs. | Rs. | Rs |
| Receipts ... ... | 44,209 | 35,569 | 34,094 | 34,758 | 52,771 |
| Charges ... ... | 4,574 | 4,226 | 4,133 | 5,039 | 5,482 |
| Surplus ... | 39,635 | 31,343 | 29,961 | 29,719 | 47,289 |

128. Regarding forest administration in Mandla, there is very little to be said at present. Nevertheless the unreserved forests include some valuable forest tracts, some of which have been examined and reported on; but this will form the subject of special report.

Mandla.

129. Hurra sales have brought in a better return than usual, and it is believed that the revenue from this source in Mandla is capable of considerable development.

130. The total receipts have amounted to Rs. 28,784 against Rs. 23,219 in the previous year. The increase is partly due to the recovery of outstandings, but the forest year running from June to June renders it difficult to apportion the outstandings to two consecutive official years.

The following is a comparative statement of receipts and charges for the past 5 years :—

| | 1872-73. | 1873-74. | 1874-75. | 1875-76. | 1876-77. |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. |
| Receipts ... ... | 34,063 | 24,782 | 26,173 | 23,219 | 28,781 |
| Charges ... ... | 3,836 | 4,461 | 4,286 | 3,954 | 4,322 |
| Surplus ... ... | 30,227 | 20,321 | 21,887 | 19,265 | 24,462 |

Betul.

131. The Nimar system which is partly commutation and partly the ordinary license system, has continued in force. The following extracts from the District report show how the commutation rates are fixed:—

General licenses.

"General or family licenses are granted by the year, and are for the supply to a single family of ordinary jungle produce, firewood, grass, thorns for hedging, &c. The fee for these licenses varies from Rs. 2 to annas 8. These licenses include common jungle timber for annual repairs of houses &c., grass for thatching, &c., and from 100 to 125 bamboos. Cultivators with 6 bullocks in addition to the articles and advantages enumerated above have the further privileges of cutting wood for the manufacture of goor, thorns and khakries for their field hedges, common timber for their threshing grounds, &c. In the case of these the license fee is the full amount of Rs. 2. Persons with a larger number of bullocks but not exceeding 12, pay Rs. 4, and so on, an additional fee of Rs. 2 being charged for every additional 6 bullocks or fraction of the same. This, however, is only in the case of sugar-cane cultivators, the fee in the case of ordinary cultivators being only 1 rupee to every 6 additional bullocks.

Special licences.

"Special licenses are granted for specific quantities of jungle produce according to a fixed tariff."

132. Dues on produce taken into Berar are collected at 7 nakas maintained for the purpose. Grazing dues were raised in 1875-76 to 2½ annas per cow or bullock and 5 annas per buffaloe, or about what is believed to be levied in private forests ; but they appear since to have been reduced respectively to 2 and 4 annas, or the same rates as were introduced by me years ago in the reserves of that district; the fact is worthy of note, chiefly because the rates charged in the reserves were a short time since objected to. The right to collect dues on jungle fruits and such minor produce has been leased.

133. Some demarcation work was carried out between the Government and private forests, but it is not stated whether the work has been completed.

134. The cutting of teak was stopped about two years ago; but the District Officer is of opinion that this restriction might now with advantage be relaxed. This may be the case, but caution is necessary in selecting the sites for cutting ; and where there is a good mixture of other species it will probably be more to the interest of Government to let the stock grow on.

The District Officer is of opinion that the unreserved forests will bear favourable comparison with the reserves, both as regards the production of timber and forest produce generally; and there certainly were some tracts which were very rich in soil and were stocked with large quantities of valuable material, but this opinion, even if correct to some extent, cannot be accepted without reservation.

135. The receipts amounted to Rs. 22,180 against Rs. 23,372 in the previous year.

The decrease is, it is believed, due to the unhealthiness of the season, which deterred people from coming from a distance to graze cattle or take produce.

The following is a comparative statement of receipts and charges for the past 5 years :—

| | 1872-73 | 1873-74 | 1874-75 | 1875-76 | 1876-77. |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs |
| Receipts ... | 31,706 | 49,155 | 46,418 | 23,372 | 22,180 |
| Charges ... | 2,227 | 3,608 | 4,092 | 5,018 | 6,543 |
| Surplus ... | 29,479 | 45,547 | 42,226 | 18,354 | 15,637 |

Chhindwara.

136. In Chhindwara the bulk of the revenue is collected and produce removed on the license system, while for certain kinds of produce the right to take dues is farmed. Dues on wood of the reserved kinds are paid at the head-quarters of the district, from whence the permits are obtained. Grazing dues and dues on wood of the unreserved kinds, fire-wood, charcoal, grass and bamboos are collected on the license system, for which purpose there are regular license vendors, who receive a percentage on their collections and have no connection with the checking establishment. The licenses are cancelled by the subordinates of the checking establishment as they pass the produce. The right to take dues on other articles coming under the head of minor forest produce is farmed.

137. The receipts for the past year amounted to Rs. 26,356, so that allowing that of the receipts of the previous year (Rs. 29,068) Rs.3,000 were outstandings from 1874-75; the total receipts for the two years are about equal. Apparently, however, there have been great variations under different heads, thus while the receipts from building wood have increased, those from fire-wood and grazing have diminished materially. The increase is said to be due to lower rates, but this point affords no field for comment, as though certain rates are quoted, the district report does not distinctly state to what class of produce they refer. The decrease under grazing, about Rs. 5,000 is mainly attributed to mortality among the cattle; but I am inclined to think that the cold and hot season rains, which in the greater part of the Ghat districts must have produced an unusual supply of fodder, is the chief cause. The decrease in fuel receipts was probably due to the stoppage of cart traffic by unseasonable rains, fuel being carted, while a large proportion of building wood is floated.

The following is a comparative statement of receipts and charges for the past five years :—

| | 1872-73. | 1873-74. | 1874-75. | 1875-76. | 1876-77. |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. |
| Receipts ... | 15,218 | 16,369 | 21,622 | 29,065 | 26,356 |
| Charges ... | 1,572 | 1,669 | 3,441 | 7,560 | 9,753 |
| Surplus ... | 13,646 | 14,700 | 18,181 | 21,505 | 16,603 |

Hoshangabad.

133. The system under which forest produce is obtained from the unreserved forest and paid for was explained in paragraph 54 of last year's report, in which reference was made to a proposed change. This change was only introduced from 1st April 1877; and on this subject Major Ricketts, the Deputy Commissioner, writes as follows :—

Remarks on present system.

"The present system has many disadvantages, which have been pointed out in the reports of the last 2 years, and I am much puzzled about suggesting an improvement. Possibly the Nimar system of family licenses, which has answered well in Nimar and has been adopted in the neighbouring district of Narsinghpur, might be suitable for this district, but it was rejected by my predecessor Colonel Dennys, and I doubt myself if it would work satisfactorily.

Objections to Nimar system.

"If the system were introduced I should have great difficulty, from the length of forest frontier that has to be guarded, in preventing the licensees from taking produce under these licenses for sale; and there would also, I believe, be greater waste.

New system introduced.

"The amendment that I have thought of, is to demand payment for the exact quantity of produce removed. I have accordingly had a list prepared of the different kinds of forest produce ordinarily used by the people, and have fixed rates favorable for agriculturists by cart-load, head-load or quantity (as the case may be), in accordance with which forest produce will hereafter have to be removed.

Licenses available for one trip only.

"Licenses instead of being available for a whole year as hitherto for certain quantities of various kinds of produce which might be removed piecemeal at different times, will now be available only once, and the license holder must take his measures to remove in one trip the whole of the produce specified in that license. If the produce be not so removed the license will lapse.

New licenses likely to be less inconvenient.

"This will oblige people perhaps to take more than one license during the course of the year, but licenses are easily procurable from the several Malguzars, Patwaris, &c., who have been selected for their distribution. The inconvenience too is slight, compared with the much more serious one that people now suffer of having their single license checked by the Forest officials at the different barriers, and the several details of forest produce that is removed, recorded from time to time on the back of the license.

"Under the new arrangements the checking will still continue, but there need be no writing; and license holders may hope to pass the barrier without any great detention."

"I have introduced this system from 1st instant, and have instructed the Forest Ranger to watch it carefully, and bring it at once to my notice if the rates fixed on the several kinds of forest produce appear to be pitched too high, or complaints are made about the system working unsatisfactorily in other ways. The experiment is worth trying, as it is based on a perfectly fair principle, and the only question is whether it can be worked without such an amount of inconvenience as may seriously harass the people."

New system will be carefully watched.

"The receipts from all sources of forest revenue as exhibited in Statement L show an increase over last year of Rs. 2,821-2-10; but it must be borne in mind that a decrease had to be recorded in 1876 of Rs. 1,813-14-4.

Receipts from forests in 1876-77.

"Still the income that is now given is the greatest that has yet been realized, and in the following table the results of the past 2 years are compared:—

| | 1875-76. | | | 1876-77. | | | Increase. | | | Decrease. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a | p. |
| Revenue from timber, firewood, charcoal ... | 19,644 | 4 | 1 | 20,400 | 7 | 11 | 756 | 2 | 10 | ... | ... | . |
| Confiscated drift, &c. ... | 70 | 10 | 9 | 56 | 11 | 6 | ... | ... | .. | 13 | 15 | 3 |
| Grazing dues | 12,958 | 8 | 11 | 12,180 | 10 | 8 | ... | ... | ... | 777 | 11 | 3 |
| Fines and forfeitures | 221 | 5 | 0 | 188 | 7 | 1 | . | ... | ... | 32 | 13 | 11 |
| Other minor produce and miscellaneous . | 7,388 | 14 | 11 | 10,278 | 9 | 4 | 2,889 | 10 | 5 | ... | ... | ... |
| Total | 40,283 | 11 | 8 | 43,101 | 14 | 6 | 3,645 | 14 | 3 | 824 | 11 | 5 |

139. That the Nimar system, which is practically commutation, so far as the bulk of the population is concerned is undesirable, is a point on which there can be no doubt, and it may be confidently stated that the change that has been made is a move in the right direction. To render it perfect, so far as collection of the revenue is concerned, we have only to give the licenses a fixed money value before they are placed in the hands of the license vendors, and to dispense with all writing on the licenses themselves. There are some difficulties in the way of effecting this, but I have no doubt that such an arrangement will gradually be brought about.

140. In 14 villages the boundaries where they adjoin Government forests were demarcated. In these cases the Government land was supposed to have been encroached on; but the Government forests were undefined by landmarks.

141. In the Malni ilaka, lac cultivation on a small scale appears to have been very successful. One hundred koosum trees were stocked on, 90 of which propagation is reported as successful. 52 maunds were also gathered from a previous stocking, in which 4 maunds of seed lac were used, and which cost in all Rs. 248. The value of the lac at present market rates is Rs. 520, and there is therefore a surplus on the transaction of Rs. 272; considering the fall in the market rates for lac, better results than these could not be wished for. The past hot season has been so very favourable, the results to be shown next year should be even more satisfactory.

A few blocks of forest were leased out for lac production for a term of 5 years, but the income derived was only Rs. 287-1-0.

142. The following is a comparative statement of the receipts and charges for the pas 5 years :—

| | 1872-73. | 1873-74. | 1874-75. | 1875 76. | 1876 77 |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs, | Rs. | Rs. |
| Receipts ... | 22 532 | 38,858 | 42,085 | 40,222 | 43,105 |
| Charges . | 5,127 | 11,934 | 12,081 | 11,970 | 11,813 |
| Surplus ... | 17,405 | 26,924 | 30,004 | 28,252 | 31,292 |

43. The Nimar system has continued in force during the year under report,

Narsinghpur.

144. The revenue of the year amounted to Rs. 9,055 against Rs. 11,462 in the previous year; the decrease is due to restriction placed on the felling of wood of the reserved kinds and to graziers being required to pay in advance instead of after the cattle had grazed for some months. The decrease from the latter cause is, however, believed to be only temporary. It also appears that some payments on account of squatter cultivation were in the previous year incorrectly credited to forests.

145. The lessee of the four tracts of 10,813 acres given out for lac cultiva; tion for a term of years has continued to pay at the rate of Rs. 25 per annum - but has not yet attempted lac propagation. A tender for 14 blocks of 36,667 acres for the same purpose was received, but immediately after the Commissioner's sanction to the lease was received, the applicant absconded without taking out a "pattah."

The following is a comparative statement of the receipts and charges for the past 5 years :—

| | 1872 73. | 1873-74. | 1874-75. | 1875 75. | 1876 77. |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. |
| Receipts ... | 8,149 | 9,460 | 9,927 | 11,462 | 9,055 |
| Charges . | 1,273 | 2,823 | 2,771 | 2,821 | 2,742 |
| Surplus | 6,876 | 6,637 | 7,156 | 8,641 | 6,313 |

146. In Nimar the system of collecting the revenue has remained unchanged. As the details of this system have from time to time been fully recorded and explained, it is unnecessary to say more on this subject.

Nimar

147. The two blocks of forests on the Great Indian Peninsula Railway to the north-east and south-west of Khandwa, which were previously closed against cutting, have remained so during the year.

The efforts made to preserve the existing crop of bamboos have been adverted to in the previous year's report; during the year under review the cutting of green bamboos in Chandgarh, which was then unreserved forest, was stopped. The Deputy Commissioner now proposes to introduce a three years rotation for bamboos. In addition to the trees previously reserved, the cutting of the following kinds without the special permission of the District Officer was stopped:—Kair, Hurdoo, Tinnus, Tendoo, Moka, Rohun, Koosum, Mohwa, Babool, Reunj and Hum. It is not certain that the reservation of all these species is necessary or desirable, but the matter will be enquired into.

148. Some experiments in the artificial propagation of lac were made, but the result is as yet uncertain.

149. The charge for fuel taken from the Government forests and exported by rail, which had previously been raised to Rs. 8 per wagon-load, was again reduced to Rs. 5 per wagon.

150. The receipts for the year amounted to Rs. 43,294 against Rs. 46,742 in the previous year. Looking to the details of the past year's transactions we find that there was a decrease in the value of fuel exported, to the amount of Rs. 3,322, but the decrease resulting from special license granted was only Rs. 1,295, while there was an increase of Rs. 353 under the head of commutation; and it would therefore appear that the demand on the Government forests for the local consumption must have increased in value by about Rs. 2,000. The receipts from fuel exported will no doubt revive, and on the whole the Nimar revenue promises well.

The following is a comparative statement of the receipts and charges for the past five years:—

| | 1872-73. | 1873-74. | 1874 75. | 1875-76. | 1876-77. |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. |
| Receipts ... | 40,310 | 38,557 | 47,515 | 46,742 | 43,294 |
| Charges ... | 11,654 | 10,737 | 10,354 | 11,337 | 12,814 |
| Surplus ... | 28,656 | 29,820 | 37,161 | 35,405 | 30,480 |

151. The Nimar system has remained in force; about three-fifths of the revenue on wood, bamboos, grass and fuel products has been derived under commutation, the balance being in payment for license for fixed quantities. The abolition of commutation has been urged by the District Officer. This, however, is a point on which I am not at present able to express an opinion, though I have no doubt that a change will ultimately become desirable and necessary.

Raipur.

152. There are two plots of Government land regularly demarcated, and to which attention is being paid; one of these, Gonghi in Dhamtari, is natural forest; while the other, Dumartalai, was open grass land 3 miles from Raipur, on which the planting on a small scale of bamboos, teak and other timber trees has been carried out, apparently with fair success.

153. For the lac lease there has been no competition, and no tracts have been leased for a term of years for the propagation of lac.

154. The revenue stands as nearly as possible at the same figure as in the previous year; but it must be remembered that the unusual rains during the carting season, and the demand for carriage for the transport of grain, must have kept down the demand on the Government forests, though it may have put people in a position to buy more.

The following is a comparative statement of the receipts and charges for the past 5 years:—

| | 1872-73. | 1873-74. | 1874-75. | 1875-76. | 1876-77. |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. |
| Receipts ... | 28,629 | 25,264 | 33,394 | 39,044 | 39,305 |
| Charges | 3,141 | 5,278 | 4,540 | 4,780 | 5,396 |
| Surplus ... | 25,488 | 19,986 | 28,854 | 34,264 | 33,909 |

155. There has been no change in the arrangements under which produce is removed from the Government forest. As regards the production of lac, a system was introduced under which producers were permitted to obtain the use of a fixed number of trees selected by themselves or the Forest Establishment at the rate of Rs. 8 per 100 trees in the first, Rs. 16 in the second, and Rs. 32 in the third year, and this arrangement has, during the year, brought in about Rs. 900.

Bilaspur.

156. The receipts amounted to Rs. 12,082 against Rs. 13,466 in the previous year. It is said that the grass crop was so far a failure that even up to date of the report, none was brought into market, and this fact probably accounts for the decrease.

The following is a comparative statement of the receipts and charges for the past 5 years:—

| | 1872-73. | 1873-74. | 1874-75. | 1875-76. | 1876-77. |
|---|---|---|---|---|---|
| | Rs. | Rs. | Rs. | Rs. | Rs. |
| Receipts . | 5,486 | 11,510 | 12,102 | 13,467 | 12,082 |
| Charges . | 972 | 1,314 | 2,611 | 2,275 | 2,357 |
| Surplus . | 4,514 | 10,196 | 9,491 | 11,192 | 9,725 |

157. As an account of the causes in the fluctuation of revenue from the different unreserved forests up to the close of 1875-76 was given in the report for that year, I have only attempted to account for difference between the receipts for the two past years.

## SECOND PART—GENERAL.

### HEAD II.

*Financial Results.*

158. The receipts and charges of the past year are shown in detail in Form No. 21. The totals of receipts and charges are as follows :—

| | | | |
|---|---|---|---|
| Receipts ... ... | | ... | Rs. 6,61,326 |
| Charges.. | A. 1,67,334 | ... | ,, 2,88,640 |
| | B. 1,21,306 | | |
| | | Surplus | Rs. 3,72,686 |

For the reserved and unreserved forests separately the figures stand thus :—

RESERVED FORESTS.

| | | |
|---|---|---|
| Receipts ... ... | ... | Rs. 1,84,255 |
| Charges ... ... | ... | ,, 1,94,955 |
| | Deficit | Rs. 10,700 |

UNRESERVED FORESTS.

| | | |
|---|---|---|
| Receipts ... ... | ... | Rs. 4,77,071 |
| Charges ... ... | ... | ,, 93,685 |
| | Surplus | Rs. 3,83,386 |

159. It will thus be seen that the receipts from the reserves fell short of the expenditure with which they are debited by Rs. 10,700, while the unreserved forests show a surplus of Rs. 3,83,386. The proportionately larger receipts derived from the unreserved forests are due partly to these forests comprising the most accessible tracts, and partly to a less conservative system of management than is considered necessary in forests that are permanently to be maintained; these differences are too well known to need special explanation. As regards charges it is to be noted that the unreserved forests are debited with those items of expenditure only which are exclusively on their account, while the reserves are debited with all other charges; but the unreserved forests are certainly debitable with a portion of the direction charges, while a portion of the other charges under B. I., with which the reserved forests are debited are not debitable to the present reserves, almost every gazetted officer having spent a certain time in the examination and inspection of other forests with the view of providing for the future by selecting those areas to which special conservation should be applied. Had it not been for the unseasonable rains to which I have before had occasion to advert, the revenue would have been higher, and probably very considerably higher than it was.

160. As required by the instructions conveyed in the Government of India review of the previous year's report, forwarded to this office under your endorsement No. 4196-192, of 8th November last, I will now proceed to give

an analysis of the charges for the past year under the three main heads therein prescribed :—

CHARGES.

| | | |
|---|---|---|
| 1st.—Against revenue from produce collected on account of Government. | A. | Rs. 52,617 |
| | B. | „ 19,335 |
| | Total | Rs. 71,952 |
| 2nd.—Against revenue from produce removed by purchasers. | A. | Rs. 93,353 |
| | B. | „ 23,730 |
| | Total | Rs. 1,17,083 |
| 3rd.—Against conservation and improvements. | A. | Rs. 21,364 |
| | B. | „ 78,241 |
| | Total | Rs. 99,605 |

161. It is impossible accurately to apportion the B. charges to the different heads without keeping a record of how almost each moment of time is spent by each member of the establishment; and as this is impossible, I have had to adopt an arbitrary method of distributing these charges according to the expenditure. It is estimated that in proportion to the expenditure, the cost of supervision and control, with which works of conservation and improvement are debitable, is ten times as heavy as the amount debitable to revenue charges, or in other words, if the B charges against revenue amount to 20 per cent on the A charges, the B charges for conservation will ordinarily be 200 per cent on the outlay on conservation. Believing that I am fairly correct in this assumption, the B charges have been distributed accordingly.

162. Against Rs. 71,952 debitable to revenue from produce collected on account of Government there are receipts to the amount of Rs 1,22,241; while against the second head of charge there are receipts on produce removed by purchasers amounting to Rs. 5,37,714. The total of these two revenue items does not agree with the total receipts, because fines and forfeitures are omitted from them.

163. The amounts debited against produce collected on account of Government do not agree with the charges shown in Forms 27 and 27 A ; but there are charges which, though of the three heads prescribed, can only be charged against produce collected on account of Government, are nevertheless not debitable to timber.

164. The following is a comparative statement of the receipts and charges for the past 5 years :—

| Year. | Receipts. | Charges. | Surplus. |
|---|---|---|---|
| | Rs. | Rs. | Rs. |
| 1872-73 ... | 4,81,673 | 2,47,837 | 2,33,836 |
| 1873-74 ... | 5,68,367 | 2,83,557 | 2,84,810 |
| 1874-75 ... | 6,61,779 | 2,94,238 | 3,67,541 |
| 1875-76 ... | 7,25,335 | 3,70,763 | 3,54,572 |
| 1876-77 ... | 6,61,326 | 2,88,640 | 3,72,686 |
| Total ... | 30,98,480 | 14,85,035 | 16,13,445 |
| Annual average ... | 6,19,696 | 2,97,007 | 3,22,689 |

From the foregoing figures it will be seen that while the surplus in 1872-73 was only Rs. 2,33,836, the average surplus for the past five years is Rs. 3,22,689; while in the past year the surplus amounted to Rs. 3,72,686, or the highest figure that has yet been attained. It has however to be borne in mind that the receipts of the past year included outstandings on account of previous years, and a reference to Form No. 28 will show that the net result of the year's transaction is only Rs. 3,12,406. Nevertheless, considering the extraordinary demand for carriage for the transport grain and the extent to which cart traffic was stopped by unseasonable rain, both of which circumstances tended to keep down the receipts from timber at depot and from produce removed by purchasers, the result of the year's transactions must be considered very satisfactory. Of the correctness of the causes assigned for the receipts not being larger than they were, abundant proof is to be found in the comparatively high receipts already returned in the current year.

Cash transactions.

165. Forms 21 and 22 require no explanation: the latter has been duly verified by the Accountant General, while the receipts under IA are supported by Form 26. Form 23 shows the outstandings and liability on account of contractors and disbursers; and Form 23A the outstandings on account of sales at the commencement and close of the year.

Stock accounts.

166. The details of the timber brought on stock will be found in Form 24; while an account of the timber on stock and received is given in Forms 25 and 25 A; the latter form also exhibits the value of the opening and closing balances and the receipts and issues. In Form 25A full details of the disposals are given; the sales therein exhibited are supported by Form 26. During the extraordinary floods of 1876 a large quantity of material was washed away, but the actual losses have been small. Other stock and its value is accounted for in Form 25 B.

Cost of timber operations.

167. The cost of bringing timber to depot and transporting it to market, as well as the cost of conversion of rough material, is given in Forms 27 and 27 A.

Financial Statement.

168. In Form 28 reference is made opposite all entries to the forms and figures that support them. The difference in the value of stock at commencement and close of the year as therein shown, is the actual difference in book valuation, and not the estimated cost of replacing the stock, which, owing to reduction in the rates of transport, would be much less.

## General Remarks.

General results.

169. An unfavourable season has kept down the receipts of the year, and consequently the profits of the department; nevertheless a fair net-revenue has been obtained, while the requirements of the people have been met on very easy terms. Some progress towards the future development of the net receipts has been made by measures for reducing the cost of transport.

A large area of forest has been more or less strictly conserved, and though there has been but a small increase in the area of the reserves, a considerable amount of inspection work, with the view of selecting those areas that it is most desirable to maintain permanently as forest, has been accomplished. Fire protection has been considerably extended, and the average cost of this measure materially reduced. Other works for the improvement, though still on a small scale, have been more extensive than in previous years, while arrangements have been made for their future expansion. Some good work has also been done by the systematic collection and record of data necessary for the future working of the forests.

170. I would here say a few words with reference to the duties of the department and the development of the forest revenue in the more immediate future. In tracts, like the greater part of the Central Provinces, with a large area of forest, and where production can be largely increased by proper conservation, it is above all things desirable that the measures of conservation adopted should not tend unduly to check consumption. The demand for forest produce depends on consumption, while the forest revenue and the profits of the State on its forest transactions must depend on the demand. Provided always that the revenue obtained is sufficient to cover the cost of maintaining or increasing production to the extent required and to leave as large a profit as could otherwise be obtained, the object of the Forest Department should be to increase consumption to the utmost. It is true that in some cases the preservation of particular forests may necessitate a check to the demands upon them, but the general policy of the Forest Department is to encourage consumption. To this point I have adverted, because in correspondence relative to measures of conservation adopted, I not unfrequently see the possible check to consumption brought forward as though it were an unqualified advantage.

171. As is only natural to expect, the most extensive and productive forests are situated where so far as the demand is concerned they are least wanted, *i. e.*, where the population is smallest. It is true that there is every prospect of a large portion of these forests becoming excesssively valuable; and in Moharli we have an instance of a largely increasing demand on a forest that but a few years ago was considered too inaccessible to be worth reserving; but as a rule, their chief value as sources of supply is prospective. In this fact we have one important reason for the Central Provinces not returning a larger revenue than they do. The revenue must depend on the demand, while the demand on the forests is regulated by the population and the accessibility of the forests. Moreover, the selling rates are materially affected by the proximity or otherwise of the forests from the well populated country; and as an illustration of this fact, I will quote the relative value at the present time of bamboos at Sonawani and in the West Pench forests within the Satpura Reserve. The value in the former is about Rs. 7 per 1,000, though they are sold at Rs. 5 to encourage consumption; while west of the Pench they sell for as much as Rs. 25 per 1,000. The same material, if produced at Nagpur, would be worth Rs. 50; near Katol or Umrer about Rs. 35, and near Arvi or Ashti about Rs. 50 per 1,000.

172. The supply of this product for the places mentioned and the country about them is at present drawn from forests varying from 40 to 70 miles distant; and, as might be expected, the consumption is much short of what it would be if the produce was procurable closer at hand. It is evident, therefore, that if bamboos, which I have only taken as an example, were produced in sufficient quantity near the places mentioned, the result would be a very considerable increase of revenue. In many instances, Government has, within easy reach of the more thickly populated country, tracts of forest land of greater or less extent; but, as might be expected, they are comparatively unproductive; and what I would advocate is, that the most advantageously situated of these should be taken in hand by the Forest Department with the view of producing in them those articles of forest produce for which there is the most certain demand, but the supply of which has to be obtained from a distance or falls short of the demand. Such ends cannot, however, be accomplished without a moderate outlay; but I am satisfied that whatever outlay may be necessary will bring in a handsome return to Government. The subject is only adverted to here as an illustration of what remains to be done, and what may be done for the future development of the revenue. It was partly this consideration that brought about the proposal for the reservation of a forest tract near Khandwa.

173. The audit of the Forest accounts remained with the Conservator during the year under report; but he has since been relieved of this responsibility. This change, however, has in no way reduced the amount of work to be got

through in the Conservator's office. With the close of the year there have also been some changes in the system of accounts. These changes are on the whole for the better, but they appear to me in some cases to have multiplied the work of the English offices, without securing any advantage; but such defects will doubtless be discovered and corrected.

174. The two apprentices previously entertained were drafted into the regular establishment as rangers. They are both intelligent and promising young men, and have profited much by the course of instruction through which they have passed. To the apprenticeships thus vacated two new men were appointed; but one of them was taken off by a sudden illness before joining his post, and the appointment has not yet been re-filled. Sanction has also been obtained to an expenditure of Rs. 150 per mensem resulting from savings on the employment of apprentices. This is a temporary arrangement, to last for two years only, but much good will result from it.

175. Since the close of the year an important change in organization has taken place. Hitherto officers of the Forest controlling establishment had nothing to do with the executive work in the unreserved forests, the executive work of these officers being confined to the management of the reserves. Now, however, wherever an officer of the controlling establishment is available, he is placed in charge of both reserved and unreserved forests. This arrangement has resulted in the break-up of most of the old divisions, and ten new charges have been formed, corresponding as far as possible with the civil districts. As regards the reserved forests, the forest officers are, as before, under the orders and direction of the Conservator; while as regards the unreserved forests they are directly under the District officers. This arrangement has for its object the better administration of the unreserved forests, and there can be no doubt that in the present it will be attended with some good. Its advantages must not, however, be overestimated, for to gain this end some important principles have had to be sacrificed; while unreserved forests cannot be looked upon as a permanent institution.

176. As already indicated, the results attained in the unreserved forests are due to the civil officers, while the department generally has benefited by the interest these officers have taken in its work. By many District officers much assistance and support has been rendered to myself and the officers of my department of which I would desire to record my acknowledgment.

177. The gazetted officers of the department have as a body worked zealously and well, Mr. Thompson and Captain Losack, Deputy Conservators, and Messrs. McKee, Fernandez, and Smythies, Assistant Conservators, have most fully earned my approbation. Several other officers have done excellent service.

178. Of the upper subordinates or forest rangers, Mahomed Ghose, Dajiba, Chander Kumar Chatterji and Mahadeo Rao have distinguished themselves most, and are most deserving of commendation; but there are several others who have rendered rarely good service.

179. I have to express my regret at the delay that has occurred in the submission of this report, but the changes that took place with the close of the official year rendered it impossible for me to undertake the preparation of annual statements, or even until recently to go over the Divisional and District reports and returns; and as it is, the report has had to be written more hurriedly than I should have desired.

I have the honor to be,

Sir,

Your most obedient Servant,

J. C. DOVETON,

*Conservator of Forests,*

Central Provinces.

# STATEMENTS.

No

FOREST DEPARTMENT,

*Annual Summary of Revenue and Expenditure in the*

| CLASSIFICATION. | Direction. | | | Northern Division. | | | Western Division. | | |
|---|---|---|---|---|---|---|---|---|---|
| RECEIPTS. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. |
| I.—Revenue from wood :— | | | | | | | | | |
| 1. Brought to Depot by Departmental agency ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (a.) Timber ... | ... | ... | ... | 12,595 | 8 | 7 | 5,885 | 6 | 2 |
| (b.) Firewood and Charcoal ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (c.) Sandalwood ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 2. Wood removed from the forests by purchasers, license holders and permit holders ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (a.) Timber ... | ... | ... | ... | 0 | 10 | 0 | 5,859 | 4 | 10 |
| (b.) Firewood and Charcoal ... | ... | ... | ... | ... | ... | ... | 1,202 | 7 | 7 |
| 3. From confiscated drift and waif wood ... | ... | ... | ... | ... | ... | ... | 32 | 8 | 0 |
| II.— Revenue from minor produce :— | | | | | | | | | |
| 1. Grazing dues and sale of grass ... | ... | ... | ... | 712 | 1 | 7 | 7,845 | 9 | 3 |
| 2. Other minor produce ... | ... | ... | ... | 86 | 10 | 7 | 1,262 | 8 | 6 |
| III.—Duty on produce of Foreign or private forests imported into British territory | | | | | | | | | |
| 1. On wood ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 2. On other forest produce ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| IV.—Miscellaneous — | | | | | | | | | |
| 1. From fines and forfeitures ... | ... | ... | ... | 1 | 0 | 0 | 84 | 4 | 0 |
| 2. From refunds to the Department ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 3. From other sources .. | 1,832 | 15 | 3 | 78 | 7 | 3 | 7,062 | 9 | 9 |
| Total Receipts .. | 1,832 | 15 | 3 | 13,474 | 6 | 0 | 29,234 | 10 | 1 |
| EXPENDITURE. | | | | | | | | | |
| A.—CONSERVANCY AND WORKING. | | | | | | | | | |
| I.—Cost of Timber operations :— | | | | | | | | | |
| 1. On wood brought to depot by Departmental agency ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (a.) Timber ... | ... | ... | ... | 13,935 | 6 | 10 | 1,460 | 12 | 9 |
| (b.) Firewood and Charcoal ... | ... | ... | ... | 4 | 4 | 0 | ... | ... | ... |
| (c.) Sandalwood ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 2. On wood removed from the forest by purchasers, license holders and permit holders ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (a.) Timber ... | ... | ... | ... | ... | ... | ... | 484 | 11 | 5 |
| (b.) Firewood and Charcoal ... | ... | ... | ... | ... | ... | ... | 484 | 11 | 5 |
| 3. On confiscated, drift and waif wood ... | ... | ... | ... | ... | ... | . | ... | ... | ... |
| Cost of collecting minor produce :— | | | | | | | | | |
| 1. Grazing and sale of grass ... | ... | ... | ... | 11 | 13 | 2 | 484 | 11 | 4 |
| 2. Other forest produce ... | ... | ... | ... | 162 | 10 | 11 | 681 | 12 | 1 |

CENTRAL PROVINCES.

*different Divisions during the year* 1876-77.

| Pachmarhi. Division. | | | Southern Division. | | | Eastern Division. | | | Central Division. | | | Saugor Division. | | | Total. | | | District Forests. | | | Grand Total. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. |
| ... | ... | .. | ... | ... | ... | ... | | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 564 | 5 | 3 | 96,343 | 7 | 4 | 237 | 3 | 10 | 2,905 | 3 | 7 | 95 | 2 | 1 | 1,18,626 | 4 | 10 | 3,614 | 13 | 2 | 1,22,241 | 2 | 0 |
| 35 | 0 | 0 | ... | ... | ... | ... | ... | ... | 9 | 0 | 0 | ... | ... | ... | 44 | 0 | 0 | ... | ... | ... | 44 | 0 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1,490 | 10 | 3 | 10,529 | 5 | 0 | 11 | 0 | 0 | 5,007 | 14 | 8 | 51 | 6 | 9 | 22,950 | 3 | 6 | 66,757 | 6 | 10 | 89,707 | 10 | 4 |
| 1,097 | 11 | 9 | 55 | 1 | 0 | 2 | 4 | 0 | 608 | 1 | 4 | 327 | 2 | 11 | 3,292 | 12 | 7 | 65,926 | 15 | 2 | 69,219 | 11 | 9 |
| 136 | 1 | 0 | ... | ... | .. | ... | ... | ... | ... | ... | .. | ... | ... | ... | 168 | 9 | 0 | 2,745 | 5 | 4 | 2,913 | 14 | 4 |
| 2,480 | 3 | 0 | 1,639 | 9 | 9 | 7 | 4 | 0 | 7,405 | 0 | 5 | 2,363 | 7 | 10 | 22,453 | 3 | 10 | 1,71,085 | 13 | 5 | 1,93,539 | 1 | 3 |
| 821 | 1 | 11 | 609 | 13 | 1 | ... | .. | ... | 642 | 8 | 8 | 195 | 0 | 5 | 3,617 | 11 | 2 | 71,641 | 4 | 5 | 75,258 | 15 | 7 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 16 | 0 | 4 | ... | ... | ... | ... | ... | ... | 20 | 8 | 0 | 2 | 10 | 1 | 124 | 6 | 5 | 1,246 | 0 | 9 | 1,370 | 7 | 2 |
| ... | ... | ... | ... | ... | ... | .. | .. | ... | ... | .. | ... | 0 | 5 | 4 | 0 | 5 | 2 | 99 | 6 | 2 | 99 | 11 | 4 |
| 2,762 | 8 | 0 | 440 | 8 | 3 | 0 | 0 | 2 | 167 | 7 | 3 | 633 | 6 | 8 | 12,977 | 14 | 7 | 93,953 | 9 | 2 | 1,0631 | 7 | 9 |
| 9,403 | 9 | 6 | 109,617 | 12 | 5 | 257 | 12 | 0 | 16,765 | 11 | 11 | 3,668 | 9 | 11 | 1,84,255 | 7 | 1 | 4,77,070 | 10 | 5 | 6,61,3 26 | 1 | 6 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 20 | 4 | 6 | 23,696 | 11 | 7 | ... | ... | ... | 1,674 | 11 | 1 | 250 | 13 | 0 | 41,038 | 11 | 9 | 853 | 14 | 11 | 41,892 | 10 | 8 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | 99 | 2 | 8 | ... | ... | ... | 103 | 6 | 8 | 27 | 8 | 0 | 130 | 14 | 8 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 279 | 12 | 0 | 529 | 15 | 1 | ... | ... | ... | 428 | 2 | 9 | 260 | 0 | 4 | 1,982 | 9 | 7 | 19,543 | 9 | 1 | 21,526 | 2 | 8 |
| 279 | 12 | 0 | 529 | 15 | 1 | ... | ... | ... | 428 | 2 | 10 | 260 | 0 | 4 | 1,982 | 9 | 8 | 19,543 | 9 | 1 | 21,526 | 2 | 9 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 279 | 12 | 0 | 529 | 15 | 1 | ... | ... | ... | 402 | 2 | 9 | 260 | 10 | 4 | 1,969 | 0 | 8 | 19,600 | 1 | 1 | 21,569 | 1 | 9 |
| 493 | 13 | 2 | 918 | 13 | 1 | 398 | 7 | 3 | 514 | 4 | 3 | 300 | 2 | 4 | 3,469 | 15 | 1 | 19,870 | 13 | 8 | 23,340 | 12 | 9 |

| Classification. | Direction. | | | Northern Division. | | | Western Division. | | |
|---|---|---|---|---|---|---|---|---|---|
| | Rs. | a | p | Rs. | a | p. | Rs. | a. | p. |
| **EXPENDITURE.—(*Continued*)** | | | | | | | | | |
| **A.—Conservancy and Working.—(*Continued*)** | | | | | | | | | |
| III.—Cost of forest organization — | | | | | | | | | |
| 1. Demarcation lines and boundary pillars or marks ... ... | ... | | ... | 7 | 4 | 0 | 299 | 8 | 9 |
| 2. Working plans ... ... ... | ... | | ... | ... | .. | .. | ... | ... | .. |
| 3. Surveys ... ... ... | ... | ... | ... | 130 | 8 | 9 | ... | .. | ... |
| IV.—Cost of the treatment and creation of forests :— | | | | | | | | | |
| 1. Natural forests ... ... ... | ... | ... | ... | ... | .. | ... | ... | ... | . |
| (a.) Protection from fire ... ... ... | ... | .. | ... | 1,823 | 4 | 5 | 1,405 | 13 | 8 |
| (b.) Fencing and enclosing ... ... ... | ... | . | ... | 5 | 7 | 3 | .. | | .. |
| (c.) Improvements and conservation ... | ... | ... | ... | 674 | 10 | 10 | 467 | 9 | 6 |
| (d.) "Reboisement" or restoration of denuded areas ... | . | ... | ... | ... | ... | ... | ... | . | .. |
| 2. Artificial forests ... ... ... | .. | ... | .. | ... | | ... | ... | ... | .. |
| (a.) Formation ... ... ... | ... | ... | ... | 90 | 10 | 5 | ... | ... | ... |
| (b.) Protection from fire ... ... .. | ... | ... | ... | ... | | ... | ... | ... | ... |
| (c.) Improvement and conservation ... ... | 116 | 9 | 11 | ... | ... | . | | .. | ... |
| (d) Fencing and enclosing ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| V.—Rent of leased forests :— | | | | | | | | | |
| VI.—Cost of collecting duty on produce of foreign or private forests imported into British territory ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| VII.—Works of utility for the development of forests :— | | | | | | | | | |
| 1. Roads and bridges ... ... ... | ... | | ... | 1,703 | 4 | 7 | ... | ... | ... |
| 2. Buildings and Offices ... ... ... | ... | ... | ... | 424 | 5 | 1 | 127 | 3 | 0 |
| 3. Compensation for land taken up for forest purposes, or for extinction of forest rights ... ... ... | .. | ... | ... | .. | ... | ... | ... | ... | ... |
| 4. Other works ... ... ... | .. | .. | ... | ... | .. | ... | ... | ... | .. |
| VIII.—Cost of departmental cattle :— | | | | | | | | | |
| 1. Purchase of stock ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | . |
| 2. Hire of stock ... ... ... | ... | .. | .. | ... | ... | .. | ... | .. | .. |
| 3. Feed and keep of cattle ... ... ... | 265 | 5 | 7 | 3,160 | 3 | 5 | 1,086 | 14 | 8 |
| IX.—Cost of departmental Plant and Tools :— | | | | | | | | | |
| 1. For timber and wood operations ... ... ... | ... | ... | ... | 227 | 7 | 0 | 45 | 6 | 0 |
| 2. For other purposes ... ... ... | ... | ... | ... | 218 | 12 | 4 | 29 | 6 | 0 |
| X.—Miscellaneous charges :— | | | | | | | | | |
| 1. Refunds ... ... ... | ... | .. | ... | ... | .. | .. | ... | .. | ... |
| 2. Law charges ... ... ... | . | ... | .. | . | | ... | ... | .. | ... |
| 3. Other charges ... ... ... | 2,518 | 15 | 10 | 96 | 3 | 6 | 289 | 9 | 0 |
| Total Conservancy and Working ... | 2,900 | 15 | 4 | 22,676 | 4 | 6 | 7,348 | 1 | 7 |
| **B.—Establishments.** | | | | | | | | | |
| I. Salaries ... ... ... | 20,758 | 6 | 10 | 14,289 | 12 | 4 | 13,169 | 6 | 6 |
| II. Travelling Allowances ... ... ... | 2,594 | 10 | 8 | 2,879 | 11 | 3 | 3,074 | 9 | 9 |
| III. Contingencies ... ... ... | 1,391 | 2 | 1 | 1,550 | 6 | 2 | 1,518 | 8 | 5 |
| Total Establishments ... | 24,744 | 3 | 7 | 18,719 | 13 | 9 | 17,762 | 8 | 8 |
| Grand Total Expenditure ... | 27,645 | 2 | 11 | 41,396 | 2 | 3 | 25,110 | 10 | 3 |

(Continued.)

| Pachmarhi Division. | | | Southern Division. | | | Eastern Division. | | | Central Division. | | | Saugor Division. | | | Total. | | | District Forests. | | | Grand Total. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. |
| 127 | 4 | 10 | 175 | 2 | 5 | ... | ... | ... | 661 | 5 | 5 | 5 | 3 | 3 | 1,275 | 12 | 8 | 2,288 | 0 | 2 | 3,563 | 12 | 10 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 55 | 0 | 6 | 55 | 0 | 6 | ... | ... | ... | 55 | 0 | 6 |
| ... | ... | ... | 529 | 10 | 0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 660 | 2 | 9 | ... | ... | ... | 660 | 2 | 9 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 943 | 5 | 0 | 3,767 | 1 | 5 | 123 | 2 | 11 | 1,909 | 1 | 3 | 215 | 12 | 6 | 10,187 | 9 | 2 | 31 | 0 | 0 | 10,218 | 9 | 2 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | 7 | 3 | ... | ... | ... | 5 | 7 | 3 |
| 10 | 2 | 0 | 565 | 6 | 8 | 171 | 10 | 10 | 1,089 | 3 | 3 | 89 | 0 | 9 | 3,067 | 11 | 10 | 400 | 3 | 7 | 3,467 | 15 | 5 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1 | 0 | 0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 73 | 11 | 8 | 165 | 6 | 1 | ... | ... | ... | 165 | 6 | 1 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 4 | 9 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 55 | 13 | 7 | 177 | 0 | 9 | ... | ... | ... | 177 | 0 | 9 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 4 | 0 | 1 | 4 | 0 | ... | ... | ... | 1 | 4 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 90 | 2 | 6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1,793 | 7 | 1 | ... | ... | ... | 1,793 | 7 | 1 |
| 43 | 7 | 0 | 2,324 | 11 | 5 | ... | ... | ... | 462 | 4 | 10 | 23 | 15 | 0 | 3,403 | 14 | 4 | ... | ... | ... | 3,425 | 14 | 4 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | 0 | 10 | 0 | ... | ... | ... | 0 | 10 | 0 | ... | ... | ... | 0 | 10 | 0 |
| ... | ... | ... | ... | ... | ... | 1 | 8 | 0 | ... | ... | ... | ... | ... | ... | 1 | 8 | 0 | ... | ... | ... | 1 | 8 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 2 | 8 | 0 | 5,265 | 4 | 8 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 9,780 | 4 | 4 | ... | ... | ... | 9,780 | 4 | 4 |
| 3 | 0 | 0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 275 | 13 | 0 | ... | ... | ... | 275 | 13 | 0 |
| 0 | 9 | 0 | ... | ... | ... | ... | ... | ... | 130 | 0 | 4 | 6 | 6 | 6 | 385 | 2 | 2 | ... | ... | ... | 385 | 2 | 2 |
| ... | ... | ... | 76 | 13 | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 76 | 13 | 4 | 3 | 12 | 0 | 80 | 9 | 4 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 0 | 0 | 1 | 0 | 0 | ... | ... | ... | 1 | 0 | 0 |
| 19 | 5 | 6 | 299 | 13 | 10 | ... | ... | ... | 3 | 10 | 0 | 2 | 10 | 0 | 3,230 | 3 | 8 | 79 | 10 | 0 | 3,309 | 13 | 8 |
| 2,598 | 10 | 9 | 39,209 | 5 | 8 | 694 | 13 | 0 | 7,802 | 13 | 5 | 1,861 | 8 | 1 | 85,092 | 8 | 4 | 82,242 | 1 | 7 | 1,67,334 | 9 | 11 |
| 6,010 | 3 | 10 | 18,090 | 5 | 6 | 1,187 | 15 | 1 | 10,288 | 5 | 0 | 4,552 | 0 | 9 | 88,346 | 7 | 10 | 14,443 | 4 | 5 | 99,789 | 12 | 3 |
| 601 | 4 | 1 | 3,149 | 13 | 5 | ... | ... | ... | 1,309 | 14 | 1 | 996 | 13 | 10 | 14,606 | 13 | 1 | ... | ... | ... | 14,606 | 13 | 1 |
| 117 | 8 | 11 | 931 | 15 | 6 | 68 | 4 | 0 | 887 | 7 | 1 | 443 | 15 | 5 | 6,009 | 3 | 7 | ... | ... | ... | 6,909 | 3 | 7 |
| 6,729 | 0 | 10 | 22,172 | 2 | 5 | 1,256 | 3 | 1 | 12,485 | 10 | 2 | 5,992 | 14 | 0 | 1,09,862 | 8 | 6 | 11,443 | 4 | 5 | 1,21,305 | 12 | 11 |
| 9,327 | 11 | 7 | 61,381 | 8 | 1 | 1,951 | 0 | 1 | 20,288 | 7 | 7 | 7,854 | 6 | 1 | 1,94,955 | 0 | 10 | 93,685 | 6 | 0 | 2,88,640 | 6 | 10 |

No.

# FOREST DEPARTMENT,

*Annual Summary of Revenue and Expenditure in*

| Classification. | Nagpur. | | | Bhandara. | | | Chanda. | | |
|---|---|---|---|---|---|---|---|---|---|
| | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. |
| **RECEIPTS.** | | | | | | | | | |
| I.—Revenue from wood :— | | | | | | | | | |
| 1. Brought to depot by Departmental agency ... | ... | ... | ... | ... | ... | .. | ... | ... | ... |
| (a.) Timber ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (b.) Firewood and charcoal ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (c.) Sandal wood ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 2. Wood removed from the forests by purchasers, license holders and permit holders ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (a.) Timber ... ... ... | 3,328 | 15 | 2 | ... | ... | ... | 6,943 | 14 | 0 |
| (b.) Firewood and charcoal ... ... | 2,029 | 13 | 0 | ... | ... | ... | 2,148 | 6 | 4 |
| 3. From confiscated drift and waif wood ... | ... | ... | ... | ... | ... | ... | 268 | 14 | 8 |
| II.—Revenue from minor produce :— | | | | | | | | | |
| 1. Grazing dues and sale of grass... ... | ... | ... | ... | ... | ... | ... | 1,164 | 2 | 9 |
| 2. Other minor produce ... ... | ... | ... | ... | 33,208 | 10 | 11 | 2,535 | 9 | 0 |
| III.—Duty on produce of Foreign or private forests imported into British territory :— | | | | | | | | | |
| 1. On wood ... ... ... | ... | ... | ... | ... | ... | .. | ... | ... | ... |
| 2. On other forest produce ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| IV.—Miscellaneous :— | | | | | | | | | |
| 1. From fines and forfeitures ... ... | ... | ... | ... | ... | ... | ... | 6 | 8 | 0 |
| 2. From refunds to the department ... | ... | ... | ... | ... | ... | ... | 1 | 0 | 0 |
| 3. From other sources ... ... | 9,987 | 3 | 0 | ... | ... | ... | 13,069 | 1 | 3 |
| Total Receipts ... | 16,345 | 15 | 2 | 33,208 | 10 | 11 | 26,137 | 8 | 0 |
| **EXPENDITURE.** | | | | | | | | | |
| A.—Conservancy and Working. | | | | | | | | | |
| I.—Cost of timber operations :— | | | | | | | | | |
| 1. On wood brought to depot by Departmental agency, | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (a.) Timber ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (b.) Firewood and charcoal ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (c.) Sandal wood ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 2. On wood removed from the forest by purchasers, license holders and permit holders ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (a.) Timber ... ... ... | 786 | 0 | 0 | 588 | 4 | 6 | 641 | 0 | 9 |
| (b.) Firewood and charcoal ... ... | 786 | 0 | 0 | 588 | 4 | 6 | 641 | 0 | 9 |
| 3. On confiscated, drift and waif wood ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| II.—Cost of collecting minor produce :— | | | | | | | | | |
| 1. Grazing and sale of grass ... ... | 786 | 0 | 0 | 588 | 4 | 6 | 641 | 0 | 9 |
| 2. Other forest produce ... ... | 786 | 0 | 0 | 588 | 5 | 1 | 641 | 2 | 5 |

# CENTRAL PROVINCES.

*the different Districts, during the year* 1876-77.

| Wardha. | | | Balaghat. | | | Jubbulpore. | | | Saugor. | | | Damoh. | | | Seoni. | | | Mandla. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rs. | a | p | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | 1 | 14 | 0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1,252 | 9 | 6 | 727 | 8 | 7 | 1,092 | 13 | 10 | 432 | 11 | 5 | 3,418 | 14 | 3 | 8,382 | 6 | 3 | 2,125 | 3 | 0 |
| 545 | 13 | 2 | 2,720 | 5 | 1 | 6,425 | 9 | 6 | 11,256 | 1 | 2 | 1,388 | 6 | 2 | 2,216 | 7 | 11 | 1,571 | 12 | 4 |
| ... | ... | ... | 99 | 2 | 7 | 69 | 1 | 6 | 86 | 2 | 6 | 73 | 0 | 11 | 2 | 15 | 9 | 915 | 10 | 6 |
| 8,360 | 5 | 3 | 8,272 | 3 | 5 | 3,673 | 0 | 4 | 19,016 | 11 | 8 | 15,855 | 6 | 0 | 5,132 | 1 | 8 | 22,381 | 10 | 0 |
| 280 | 10 | 9 | 1,892 | 7 | 2 | 2,768 | 12 | 7 | 3,172 | 11 | 3 | 3,951 | 12 | 1 | 2,908 | 2 | 2 | 1,583 | 12 | 1 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 39 | 15 | 9 | 4 | 0 | 0 | 6 | 2 | 0 | ... | ... | ... | 171 | 8 | 0 | 321 | 9 | 10 | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 8 | 0 | ... | ... | ... | 36 | 7 | 2 |
| 15 | 5 | 0 | 12,031 | 6 | 7 | 2,407 | 12 | 9 | 45 | 0 | 9 | 7,696 | 8 | 11 | 33,807 | 13 | 10 | 166 | 15 | 2 |
| 10,494 | 11 | 5 | 25,748 | 15 | 5 | 16,443 | 4 | 6 | 34,009 | 6 | 9 | 32,559 | 0 | 4 | 52,771 | 9 | 5 | 28,784 | 6 | 3 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 6 | 12 | 0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 64 | 2 | 7 |
| 27 | 8 | 0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 847 | 5 | 10 | 1,123 | 3 | 1 | 231 | 15 | 6 | 791 | 0 | 6 | 1,173 | 6 | 4 | 1,157 | 10 | 9 | 858 | 6 | 8 |
| 847 | 5 | 10 | 1,123 | 3 | 1 | 231 | 15 | 6 | 791 | 0 | 6 | 1,173 | 6 | 4 | 1,157 | 10 | 9 | 858 | 6 | 8 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 903 | 13 | 10 | 1,123 | 3 | 1 | 231 | 15 | 6 | 791 | 0 | 6 | 1,173 | 6 | 4 | 1,157 | 10 | 9 | 858 | 6 | 8 |
| 847 | 6 | 0 | 1,123 | 4 | 3 | 232 | 1 | 6 | 791 | 2 | 6 | 1,173 | 7 | 8 | 1,157 | 12 | 3 | 858 | 8 | 0 |

No. 21.—

FOREST DEPARTMENT,

*Annual Summary of Revenue and Expenditure in*

| Classification. | Betul. | | | Chhindwara. | | | Hoshangabad. | | |
|---|---|---|---|---|---|---|---|---|---|
| | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. |
| **RECEIPTS.** | | | | | | | | | |
| I.—Revenue from wood:— | | | | | | | | | |
| 1. Brought to depot by Departmental agency ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (a.) Timber ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (b.) Firewood and charcoal ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (c.) Sandal wood ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 2. Wood removed from the forests by purchasers, license holders and permit holders ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (a.) Timber ... ... ... | 4,452 | 11 | 10 | 6,483 | 3 | 4 | 12,924 | 11 | 7 |
| (b.) Firewood and charcoal ... ... | 4,491 | 14 | 6 | 3,575 | 13 | 11 | 7,475 | 12 | 4 |
| 3. From confiscated drift and waif wood ... | ... | ... | ... | 439 | 11 | 5 | 57 | 15 | 9 |
| II.—Revenue from minor produce:— | | | | | | | | | |
| 1. Grazing dues and sale of grass... ... | 10,216 | 5 | 0 | 14,358 | 13 | 5 | 12,118 | 12 | 5 |
| 2. Other minor produce ... ... | 2,772 | 2 | 9 | 914 | 0 | 1 | 6,018 | 2 | 9 |
| III.—Duty on produce of Foreign or private forests imported into British territory:— | | | | | | | | | |
| 1. On wood ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 2. On other forest produce ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| IV.—Miscellaneous:— | | | | | | | | | |
| 1. From fines and forfeitures ... ... | ... | ... | ... | 472 | 6 | 10 | 187 | 2 | 10 |
| 2. From refunds to the department ... | ... | ... | ... | 0 | 14 | 3 | 1 | 4 | 0 |
| 3. From other sources ... ... | 247 | 7 | 3 | 111 | 8 | 7 | 4,321 | 0 | 10 |
| Total Receipts ... | 22,180 | 9 | 4 | 26,356 | 7 | 10 | 43,104 | 14 | 6 |
| **EXPENDITURE.** | | | | | | | | | |
| A.—Conservancy and Working. | | | | | | | | | |
| I.—Cost of timber operations:— | | | | | | | | | |
| 1. On wood brought to depot by Departmental agency | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (a) Timber ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (b.) Firewood and charcoal ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (c.) Sandal wood ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 2. On wood removed from the forest by purchasers, license holders and permit holders ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (a.) Timber ... ... ... | 1,264 | 13 | 0 | 2,420 | 5 | 4 | 2,640 | 8 | 4 |
| (b.) Firewood and charcoal ... ... | 1,264 | 13 | 0 | 2,420 | 5 | 4 | 2,640 | 8 | 4 |
| 3. On confiscated, drift and waif wood ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| II.—Cost of collecting minor produce:— | | | | | | | | | |
| 1. Grazing and sale of grass ... ... | 1,264 | 13 | 0 | 2,420 | 5 | 4 | 2,640 | 8 | 4 |
| 2. Other forest produce ... ... | 1,264 | 14 | 0 | 2,420 | 6 | 7 | 8,266 | 9 | 9 |

*(Continued.)*

## CENTRAL PROVINCES.

*the different Districts, during the year* 1876-77.

| Narsinghpur. | | | Nimar. | | | Raipur. | | | Bilaspur | | | Sironcha. | | | Sambalpur. | | | Total. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rs. | a. | p. | Rs. | a | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. |
| ... | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. | ... |
| ... | ... | ... | 1,305 | 8 | 10 | 51 | 4 | 4 | ... | ... | ... | 2,256 | 2 | 0 | ... | ... | ... | 3,614 | 13 | 2 |
| ... | ... | ... | ... | ... | ... | ... | .. | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | . | .. | ... | ... | ... | ... | ... | ... |
| ... | | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 356 | 7 | 3 | 7,609 | 2 | 9 | 2,107 | 13 | 11 | 5,058 | 4 | 2 | 60 | 0 | 0 | ... | ... | ... | 66,757 | 6 | 10 |
| 2,812 | 2 | 2 | 3,289 | 6 | 8 | 13,410 | 3 | 2 | 565 | 15 | 9 | ... | ... | ... | ... | ... | ... | 65,926 | 15 | 2 |
| 48 | 11 | 9 | 415 | 14 | 0 | ... | .. | . | 83 | 8 | 0 | 184 | 8 | 0 | ... | ... | ... | 2,745 | 5 | 4 |
| 5,140 | 15 | 1 | 21,043 | 7 | 9 | 17,492 | 8 | 5 | 4,662 | 2 | 6 | 2,197 | 3 | 9 | ... | ... | ... | 1,71,085 | 13 | 5 |
| 659 | 1 | 4 | 1,969 | 8 | 3 | 4,685 | 8 | 0 | 1,697 | 11 | 3 | 622 | 10 | 0 | ... | ... | ... | 71,641 | 4 | 5 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. | ... | ... | . | ... | ... | .. | ... | ... | ... |
| ... | ... | ... | 22 | 0 | 9 | 7 | 8 | 0 | 7 | 2 | 9 | ... | ... | ... | ... | ... | ... | 1,246 | 0 | 9 |
| ... | ... | ... | 52 | 7 | 11 | ... | ... | ... | ... | ... | ... | 3 | 12 | 10 | ... | ... | ... | 99 | 6 | 2 |
| 37 | 15 | 0 | 7,586 | 14 | 9 | 1,551 | 0 | 0 | 7 | 13 | 0 | 848 | 14 | 6 | 13 | 12 | 0 | 93,953 | 9 | 2 |
| 9,055 | 4 | 7 | 43,294 | 7 | 8 | 39,305 | 13 | 10 | 12,082 | 9 | 5 | 6,173 | 3 | 1 | 13 | 12 | 0 | 4,77,070 | 10 | 5 |
| ... | ... | ... | ... | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | .. | .. | ... | ... | ... | 783 | 0 | 4 | ... | ... | ... | 853 | 14 | 11 |
| ... | ... | ... | ... | .. | ... | ... | .. | .. | ... | ... | ... | ... | ... | | ... | ... | ... | 27 | 8 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | .. | .. | ... | ... | ... | ... | ... | ... |
| 663 | 10 | 7 | 2,586 | 14 | 3 | 1,169 | 5 | 7 | 589 | 4 | 4 | 10 | 5 | 9 | ... | ... | ... | 19,543 | 9 | 1 |
| 663 | 10 | 7 | 2,586 | 14 | 3 | 1,169 | 5 | 7 | 589 | 4 | 4 | 10 | 5 | 9 | ... | ... | ... | 19,543 | 9 | 1 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 663 | 10 | 7 | 2,586 | 14 | 3 | 1,169 | 5 | 7 | 589 | 4 | 4 | 10 | 5 | 9 | ... | ... | ... | 19,600 | 1 | 1 |
| 663 | 10 | 9 | 2,687 | 1 | 2 | 1,169 | 6 | 6 | 589 | 5 | 5 | 10 | 5 | 10 | ... | ... | ... | 19,870 | 13 | 8 |

No. 21.—

FOREST DEPARTMENT,

*Annual Summary of Revenue and Expenditure in the*

| Classification. | Nagpur. | | | Bhandara. | | | Chanda. | | |
|---|---|---|---|---|---|---|---|---|---|
| EXPENDITURE.—*Continued.* | | | | | | | | | |
| A.—CONSERVANCY AND WORKING.—*Contd.* | Rs. | a. | p. | Rs. | a. | p | Rs. | a. | p. |
| III.—Cost of forest organization ... ... | ... | ... | . | .. | ... | ... | ... | .. | . |
| 1. Demarcation lines and boundary pillars or marks.. | ... | ... | ... | ... | ... | ... | ... | ... | .. |
| 2. Working plans ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | .. |
| 3. Surveys ... ... ... | ... | ... | .. | ... | ... | ... | ... | ... | ... |
| IV.—Cost of the treatment and creation of forests ... | ... | . | ... | .. | ... | ... | ... | ... | ... |
| 1. Natural forests ... ... .. | . | ... | ... | ... | ... | ... | ... | ... | ... |
| (*a.*) Protection from fire ... ... | ... | ... | ... | ... | ... | ... | ... | ... | . |
| (*b.*) Fencing and enclosing ... ... | ... | . | ... | ... | ... | ... | ... | ... | ... |
| (*c.*) Improvements and conservation .. .. | ... | | ... | .. | ... | ... | ... | ... | .. |
| (*d.*) "Reboisement" or restoration of denuded areas ... ... ... | ... | .. | ... | .. | ... | . | ... | ... | .. |
| 2. Artificial forests ... ... ... | ... | ... | .. | ... | ... | ... | ... | ... | ... |
| (*a.*) Formation ... ... ... | ... | ... | ... | .. | ... | ... | ... | ... | . |
| (*b.*) Protection from fire ... ... | ... | ... | .. | | ... | ... | ... | .. | .. |
| (*c.*) Improvement and conservation ... | ... | . | ... | .. | | . | ... | .. | ... |
| (*d.*) Fencing and enclosing ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| V.—Rent of leased forests ... ... ... | ... | ... | | ... | ... | ... | .. | . | .. |
| VI.—Cost of collecting duty on produce of foreign or private forests imported into British territory.. | ... | . | ... | ... | ... | ... | ... | ... | ... |
| VII.—Works of utility for the development of forests ... | | | ... | . | ... | ... | ... | ... | . |
| 1. Roads and bridges ... ... | ... | . | ... | ... | ... | ... | ... | ... | . |
| 2. Buildings and Offices ... ... | . | ... | ... | ... | ... | ... | ... | ... | ... |
| 3. Compensation for land taken up for forest purposes, or for extinction of forest rights .. | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 4. Other works ... ... ... | .. | .. | ... | ... | ... | ... | ... | ... | .. |
| VIII.—Cost of departmental cattle ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1. Purchase of stock ... ... | .. | ... | .. | ... | ... | .. | ... | ... | .. |
| 2. Hire of stock ... ... ... | ... | ... | .. | ... | ... | ... | ... | ... | ... |
| 3. Feed and keep of cattle ... ... | . | ... | ... | . | ... | ... | ... | ... | ... |
| IX.—Cost of departmental Plant and Tools ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1. For timber and wood operations ... | ... | .. | ... | .. | ... | ... | ... | ... | ... |
| 2. For other purposes ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| X.—Miscellaneous charges ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1. Refunds ... ... ... | .. | . | ... | ... | ... | ... | ... | . | ... |
| 2. Law charges ... ... ... | .. | ... | ... | ... | ... | ... | ... | | ... |
| 3. Other charges ... ... ... | .. | ... | ... | ... | ... | ... | ... | ... | ... |
| Total Conservancy and working ... | 3,144 | 0 | 0 | 2,353 | 2 | 7 | 2,564 | 4 | 8 |
| B.—ESTABLISHMENTS. | | | | | | | | | |
| I.—Salaries ... ... ... ... | 912 | 0 | 0 | 492 | 0 | 0 | 1,144 | 8 | 7 |
| II.—Travelling Allowances ... ... ... | ... | ... | ... | ... | .. | ... | ... | ... | ... |
| III.—Contingencies ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Total Establishments ... | 912 | 0 | 0 | 492 | 0 | 0 | 1,144 | 8 | 7 |
| Grand Total Expenditure ... | 4,056 | 0 | 0 | 2,845 | 2 | 7 | 3,708 | 13 | 3 |

(*Continued.*)

CENTRAL PROVINCES.

*different districts during the year* 1876-77.

| Wardha. | | | Balaghat. | | | Jubbulpore. | | | Saugor. | | | Damoh. | | | Seoni. | | | Mandla. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 | 0 | 0 | 68 | 13 | 1 | 194 | 12 | 1 | 145 | 0 | 8 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | 31 | 0 | 0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 114 | 12 | 6 | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | 79 | 10 | 0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 3,480 | 3 | 6 | 4,523 | 13 | 6 | 1,007 | 10 | 0 | 3,169 | 4 | 0 | 4,877 | 4 | 3 | 4,825 | 8 | 7 | 3,642 | 15 | 3 |
| 672 | 0 | 0 | 672 | 0 | 0 | 672 | 0 | 0 | 792 | 0 | 0 | 670 | 10 | 4 | 657 | 0 | 0 | 679 | 0 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 672 | 0 | 0 | 672 | 0 | 0 | 672 | 0 | 0 | 792 | 0 | 0 | 670 | 10 | 4 | 657 | 0 | 0 | 679 | 0 | 0 |
| 4,152 | 3 | 6 | 5,193 | 13 | 6 | 1,679 | 10 | 0 | 3,961 | 4 | 0 | 5,547 | 14 | 7 | 5,482 | 8 | 7 | 4,321 | 15 | 3 |

No. 21.—

FOREST DEPARTMENT,

*Annual Summary of Revenue and Expenditure in the*

| Classification. | Betul. | | | Chhindwara. | | | Hosbangabad. | | |
|---|---|---|---|---|---|---|---|---|---|
| EXPENDITURE.—*Continued.* | | | | | | | | | |
| A.—CONSERVANCY AND WORKING.—*Contd.* | Rs. | a | p. | Rs. | a. | p. | Rs, | a. | p. |
| III.—Cost of forest organization ... ... | ... | . | ... | ... | ... | ... | ... | ... | ... |
| 1. Demarcation lines and boundary pillars or marks. | 500 | 0 | 0 | ... | .. | ... | 182 | 6 | 4 |
| 2. Working plans ... ... ... | | .. | .. | ... | ... | ... | ... | ... | ... |
| 3. Surveys ... ... ... ... | ... | ... | .. | ... | ... | ... | ... | ... | ... |
| IV.—Cost of the treatment and creation of forests ... | ... | ... | ... | ... | ... | .. | ... | ... | ... |
| 1. Natural forests ... ... ... | | . | | ... | ... | ... | ... | ... | ... |
| (*a*). Protection from fire ... ... | ... | .. | . | ... | ... | ... | ... | ... | ... |
| (*b*.) Fencing and enclosing ... ... | | | ... | ... | ... | ... | ... | ... | ... |
| (*c*.) Improvements and conservation ... | 60 | 0 | 0 | ... | ... | ... | 123 | 1 | 1 |
| (*d*.) "Reboisement" or restoration of denuded areas ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| 2. Artificial forests ... ... ... | .. | ... | ... | ... | ... | ... | ... | ... | ... |
| (*a*.) Formation ... ... .. | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (*b*.) Protection from fire ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (*c*.) Improvement and conservation ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| (*d*.) Fencing and enclosing ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| V.—Rent of leased forests ... ... ... | ... | .. | . | ... | ... | ... | ... | ... | ... |
| VI.—Cost of collecting duty on produce of foreign or private forests imported into British territory ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| VII.—Works of utility for the development of forests ... | . | . | ... | ... | ... | ... | ... | ... | . |
| 1. Roads and bridges ... ... ... | ... | .. | ... | ... | ... | ... | ... | ... | . |
| 2. Buildings and Offices ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 3. Compensation for land taken up for forest purposes, or for extinction of forest rights ... | ... | ... | .. | ... | ... | ... | ... | .. | ... |
| 4. Other works ... ... ... | . | ... | ... | ... | .. | ... | ... | ... | ... |
| VIII.—Cost of departmental cattle ... ... | ... | ... | ... | ... | .. | ... | ... | ... | ... |
| 1. Purchase of stock ... ... ... | .. | . | ... | ... | ... | ... | ... | ... | ... |
| 2. Hire of stock ... ... ... | ... | .. | | ... | ... | ... | ... | ... | ... |
| 3. Feed and keep of cattle ... ... | .. | | ... | ... | ... | ... | ... | ... | ... |
| IX.—Cost of departmental Plant and Tools ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1. For timber and wood operations ... | ... | ... | ... | ... | ... | ... | ... | ... | .. |
| 2. For other purposes ... ... ... | ... | .. | ... | ... | ... | ... | ... | ... | ... |
| X.—Miscellaneous charges ... ... ... | ... | .. | .. | ... | ... | ... | ... | ... | ... |
| 1. Refunds ... ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 2. Law charges ... ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 3. Other charges ... ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Total Conservancy and Working ... | 5,619 | 5 | 0 | 9,681 | 6 | 7 | 11,093 | 10 | 2 |
| B.—ESTABLISHMENTS. | | | | | | | | | |
| I.—Salaries ... ... ... ... | 924 | 0 | 0 | 72 | 0 | 0 | 720 | 0 | 0 |
| II.—Travelling Allowances ... ... ... | ... | . | ... | ... | ... | ... | ... | ... | ... |
| III.—Cantingencies ... ... ... | ... | ... | . | ... | ... | ... | ... | ... | ... |
| Total Establishments ... | 924 | 0 | 0 | 72 | 0 | 0 | 720 | 0 | 0 |
| Grand Total Expenditure ... | 6,543 | 5 | 0 | 9,753 | 6 | 7 | 11,813 | 10 | 2 |

(*Continued.*)

## CENTRAL PROVINCES.

*different districts during* 1876-77.

| Narsinghpur. | | | Nimar. | | | Raipur. | | | Bilaspur. | | | Sironcha. | | | Sambalpur. | | | Total. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rs. | a. | p. | Rs. | a. | p | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p | Rs. | a. | p. |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | 1,192 | 0 | 0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2,288 | 0 | 2 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 31 | 0 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | 2 | 6 | 0 | 100 | 0 | 0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 400 | 3 | 7 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 3 | 12 | 0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 12 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ...79 | 10 | 0 |
| 2,658 | 6 | 6 | 11,642 | 1 | 11 | 4,777 | 7 | 3 | 2,357 | 2 | 5 | 824 | 7 | 5 | ... | ... | ... | 82,242 | 1 | 7 |
| 84 | 0 | 0 | 1,172 | 0 | 0 | 619 | 1 | 6 | ... | ... | ... | 489 | 0 | 0 | ... | ... | ... | 11,443 | 4 | 5 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 84 | 0 | 0 | 1,172 | 0 | 0 | 619 | 1 | 6 | ... | ... | ... | 489 | 0 | 0 | ... | ... | ... | 11,443 | 4 | 5 |
| 2,742 | 6 | 6 | 12,814 | 1 | 11 | 5,396 | 8 | 9 | 2,357 | 2 | 5 | 1,313 | 7 | 5 | ... | ... | ... | 93,685 | 6 | 0 |

No. 22.

# FOREST DEPARTMENT, CENTRAL PROVINCES.

*Annual abstract account of cash transaction of the Forest Department Central Provinces for the year* 1876-77.

| Heads of Accounts. | | Amount. Rs. | a. | p. |
|---|---|---|---|---|
| To Cash in hand on 1st April 1876 ... | | 7,760 | 2 | 0 |
| „ Revenue received .. | | 6,61,326 | 1 | 6 |
| PROVINCIAL SERVICES. | | | | |
| „ Book transfer on account of Stock supplied by the Superintendent, School of Industry, Jubbulpore . | Rs. a. p. 22 0 0 | | | |
| „ Book transfer on account of printing .. | 47 12 6 | | | |
| „ Book transfer on account of hemp ropes supplied... | 23 6 0 | 93 | 2 | 6 |
| „ Remittances from State Treasuries ... | | 2,88,322 | 2 | 9 |
| „ Deposit received ... | | 227 | 14 | 6 |
| „ Advances recovered ... | | 1,24,556 | 2 | 7 |
| „ Suspense accounts ... | | 4,010 | 7 | 7 |
| GOVERNMENT OF INDIA. | | | | |
| „ Book transfer on account of carriage of sleepers by Holkar State Railway ... | 87 0 0 | | | |
| „ Uncovenanted Family Pension Fund ... | 949 14 0 | | | |
| „ General Family Pension Fund ... | 315 0 0 | 1,351 | 14 | 0 |
| GOVERNMENT OF MADRAS. | | | | |
| „ Military Fund | | 657 | 7 | 4 |
| DEPARTMENT PUBLIC WORKS. | | | | |
| „ Write back of an amount twice credited in February and March 1876 ... | | 76 | 13 | 4 |
| MILITARY DEPARTMENT, BOMBAY. | | | | |
| „ Book transfer on account of medicine supplied | 537 10 11 | 537 | 10 | 11 |
| „ Value of timber departmentally consumed ... | | 205 | 8 | 10 |
| Total | | 10,89,125 | 7 | 10 |

| Heads of Accounts. | | Amount. Rs. | a. | p. |
|---|---|---|---|---|
| By Expenditure of the department | | 2,88,640 | 6 | 10 |
| PROVINCIAL SERVICES. | | | | |
| „ Expenditure chargeable to Provincial Services on account of office rent and printing charges &c. | Rs a. p. 1,172 1 0 | | | |
| „ Book transfer on account of timber supplied to Superintendent, School of Industry, Jubbulpore ... | 309 3 10 | | | |
| „ Book transfer on account of bamboos supplied to Police at Betul ... | 20 0 0 | | | |
| „ Book transfer on account of timber supplied to Superintendent Jail, Chhindwara ... | 14 15 7 | 1,516 | 4 | 5 |
| „ Remittances to State Treasuries ... | | 5,68,488 | 12 | 5 |
| „ Deposits repaid ... | | 1,157 | 0 | 6 |
| „ Advances made ... | | 1,25,274 | 4 | 3 |
| „ Suspense accounts ... | | 4,010 | 7 | 7 |
| GOVERNMENT OF INDIA. | | | | |
| „ Book transfer on account of timber supplied to D. P. W., Holkar State Railway ... | 236 4 0 | | | |
| „ Book transfer on account of brambles supplied to Collector of Customs, Saugor .. | 10 13 11 | 247 | 1 | 11 |
| GOVERNMENT OF BENGAL. | | | | |
| „ Book transfer on account of an advance made to Mr. Jacob, Deputy Conservator of Forests ... | | 700 | 0 | 0 |
| GOVERNMENT OF NORTH-WESTERN PROVINCES. | | | | |
| „ Book transfer on account of leave allowance to Shaik Mohodeen, Sub-Assistant Conservator, N. W. P. ... | | 800 | 0 | 0 |
| GOVERNMENT OF MADRAS. | | | | |
| „ Book transfer on account of timber supplied to Commissary of Ordnance, Nagpur ... | | 130 | 0 | 0 |
| DEPARTMENT PUBLIC WORKS. | | | | |
| „ Book of transfer on account of timber supplied to Department Public Works ... | | 93,729 | 3 | 10 |
| MILITARY DEPARTMENT, BENGAL. | | | | |
| „ Book of transfer on account of timber supplied to Commissariat Officer, Jubbulpore ... | 152 8 0 | 152 | 8 | 0 |
| „ Value of timber, departmentally consumed ... | | 205 | 8 | 10 |
| „ Cash balance in hand on 31st March 1877 ... | | 4,073 | 13 | 3 |
| Total ... | | 10,89,125 | 7 | 10 |

No. 23.

# FOREST DEPARTMENT, CENTRAL PROVINCES.

*Annual Statement of Outstandings and Liabilities of the Department on account of Contractors and Disbursers for the year* 1876-77.

| Division. | Department Debtor. | | | | | | | | | Department Creditor. | | | | | | | | | Balances due. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | At commencement of year. | | | Recoveries in cash, and value of supplies and work done during the year. | | | At close of year. | | | At commencement of year. | | | Payments made during year. | | | At close of year. | | | To Department outstandings. | | | By Department liabilities. | | |
| | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. |
| Direction ... ... ... | ... | .. | . | 5,330 | 14 | 10 | 5,330 | 14 | 10 | 1,052 | 3 | 1 | 4,389 | 10 | 11 | 5,441 | 14 | 0 | 110 | 15 | 2 | ... | . | ... |
| Northern Division ... ... | ... | ... | ... | 20,964 | 4 | 11 | 20,964 | 4 | 11 | 2,117 | 8 | 0 | 20,921 | 15 | 4 | 23,039 | 7 | 4 | 2,075 | 2 | 5 | 8 | 10 | 0 |
| Western do. ... ... | ... | . | ... | 23,136 | 5 | 11 | 23,136 | 5 | 11 | 2,708 | 4 | 7 | 22,281 | 1 | 4 | 24,989 | 5 | 11 | 1,853 | 0 | 0 | ... | ... | ... |
| Pachmarhi do. ... ... | ... | .. | ... | 3,240 | 12 | 4 | 3,240 | 12 | 4 | ... | | . | 3,996 | 13 | 9 | 3,996 | 13 | 9 | 756 | 1 | 5 | ... | .. | .. |
| Southern do. ... ... | ... | ... | . | 54,914 | 12 | 6 | 54,914 | 12 | 6 | 6,037 | 3 | 5 | 57,108 | 4 | 10 | 63,145 | 8 | 3 | 8,230 | 11 | 9 | ... | ... | ... |
| Eastern do. ... ... | ... | ... | | 2,342 | 14 | 2 | 2,342 | 14 | 2 | 707 | 0 | 5 | 1,837 | 3 | 3 | 2,544 | 3 | 8 | 201 | 5 | 6 | ... | ... | ... |
| Central do. ... .. | ... | . | ... | 13,411 | 1 | 4 | 13,411 | 1 | 4 | 715 | 13 | 1 | 13,750 | 12 | 8 | 14,466 | 9 | 9 | 1,055 | 8 | 5 | ... | ... | ... |
| Saugor do. ... ... | ... | ... | . | 1,020 | 13 | 6 | 1,020 | 13 | 6 | 335 | 10 | 10 | 988 | 6 | 2 | 1,324 | 1 | 0 | 303 | 3 | 6 | ... | ... | ... |
| Total ... | ... | ... | ... | 1,24,361 | 15 | 6 | 1,24,361 | 15 | 6 | 13,673 | 11 | 5 | 1,25,274 | 4 | 3 | 1,38,947 | 15 | 8 | 14,586 | 0 | 2 | 8 | 10 | 0 |
| District Forests ... ... ... | ... | ... | ... | 1,295 | 8 | 1 | 1,295 | 8 | 1 | 1,295 | 8 | 1 | . . | ... | | 1,295 | 8 | 1 | . . | ... | ... | ... | ... | ... |
| Grand Total .. | ... | ... | . | 1,25,657 | 7 | 7 | 1,25,657 | 7 | 7 | 14,969 | 3 | 6 | 1,25,274 | 4 | 3 | 1,40,243 | 7 | 9 | 14,586 | 0 | 2 | 8 | 10 | 0 |

No. 23 A.

# FOREST DEPARTMENT, CENTRAL PROVINCES.

*Annual Statement of Outstandings on sale accounts for the year* 1876-77.

| Divisions. | Outstanding at commencement of the year. | Value of sale during the year. | Total. | Recoveries made during the year. | Written off to profit and loss. | Balance outstanding. | Remarks. |
|---|---|---|---|---|---|---|---|
| | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | |
| Direction ... | 100 0 0 | 1,872 12 4 | 1,972 12 4 | 1,832 15 3 | ... ... ... | 139 13 1 | |
| Northern Division ... | 5,286 11 0 | 10,041 14 0 | 15,328 9 0 | 13,474 6 0 | ... ... ... | 1,854 3 0 | |
| Western do. ... | ... ... ... | 31,004 7 5 | 31,004 7 5 | 29,234 10 1 | ... ... ... | 1,769 13 4 | |
| Pachmarhi do. ... | ... ... ... | 9,403 9 6 | 9,403 9 6 | 9,403 9 6 | ... ... ... | ... ... ... | |
| Southern do. ... | 59,938 14 1 | 52,431 7 4 | 1,12,370 5 5 | 1,09,617 12 5 | ... ... ... | 2,752 9 0 | |
| Eastern do. ... | ... ... ... | 257 12 0 | 257 12 0 | 257 12 0 | ... ... ... | ... ... ... | |
| Central do. ... | ... ... ... | 16,765 11 11 | 16,765 11 11 | 16,765 11 11 | ... ... ... | ... ... ... | |
| Saugor do. ... | 2 0 0 | 4,008 7 4 | 4,010 7 4 | 3,668 9 11 | ... ... ... | 341 13 5 | |
| Total ... | 65,327 9 1 | 1,25,786 1 10 | 1,91,113 10 11 | 1,84,255 7 1 | ... ... ... | 6,858 3 10 | |
| Deduct amount recovered on account of previous years. | 6,3473 6 1 | Deduct balance outstanding on account of former years ... | | | | 1,854 3 0 | |
| Balance outstanding on account of previous years ... | 1,854 3 0 | Balance outstanding on account of the year ... | | | | 5,004 0 10 | |

No. 24.

# FOREST DEPARTMENT, CENTRAL PROVINCES.

*Statement of Timber brought to Depots from the different Forest Divisions during* 1876-77.

| Name of River or Division. | Forest. | Description of Timber. | Pieces. | Cubic feet. | Totals of each River. | |
|---|---|---|---|---|---|---|
| | | | | | Pieces. | Cubic feet. |
| Northern Division... | Banjar Valley Forest. | Beeja and Dowra sleepers. | 288 | 384 | | |
| ,, | Kisli Depot ... | Sal logs ... | 9 | 162 | | |
| ,, | Sackrighat Depot ... | Do. ... | 3 | 41 | | |
| ,, | Goarighat do. ... | Do. ... | 1 | 20 | | |
| ,, | Tilri do. ... | Do. .. | 13 | 371 | | |
| ,, | Khana do. ... | Do. ... | 424 | 18,360 | | |
| ,, | Bisander do. ... | Teak logs ... | 243 | 2,913 | | |
| ,, | Banjar Valley Forest, | Sal logs squared ... | 8 | 78 | | |
| ,, | Goarighat Depot ... | Sal sleepers ... | 3 | 11 | | |
| ,, | Khana do. ... | Do. ... | 1,418 | 5,072 | | |
| ,, | Kisli do. ... | Bamboos ... | 31,840 | ... | | |
| ,, | Tilri do. ... | Do. ... | 73,760 | ... | | |
| ,, | Barala do. ... | Do. ... | 1,000 | ... | | |
| ,, | Singrampur Depot... | Do. ... | 845 | ... | | |
| ,, | Tilri do. ... | Bullees ... | 2,363 | ... | | |
| ,, | Sackri do. ... | Do. ... | 840 | ... | | |
| ,, | Khana do. .. | Sal scantlings ... | 94 | 323 | | |
| ,, | Mandla do. ... | Sal pieces ... | 1 | ... | | |
| ,, | Singrampur do. ... | Mulgas ... | 56 | ... | | |
| ,, | Barala do. ... | Teak pieces ... | 334 | ... | | |
| ,, | Kisli do. ... | Boats ... | 26 | ... | | |
| | | | | | 1,13,569 | 27,735 |
| Western Division ... | Punassa do. ... | Anjun sleepers ... | 105 | 131 | | |
| ,, | | Teakwood in pieces... | 14,671 | ... | | |
| ,, | | Do. in jotees... | 7 | ... | | |
| ,, | | Do. 2 bullocks cart load. | 464 | ... | | |
| ,, | | Do. 4 do. ... | 28 | ... | | |
| | | | | | 15,275 | 131 |
| Parchmarhi Division. | | Teakwood in jotees... | 311 | ... | | |
| ,, | | Do. 2 bullocks cart load. | 2 | ... | | |
| ,, | | Teakwood charputs... | 37 | ... | | |
| ,, | | Teak planks. ... | 3 | ... | | |
| ,, | | Teakwood head load.. | 80 | ... | | |
| ,, | | Copsed do. ... | 30 | ... | | |
| ,, | | Bamboo head load ... | 33 | .. | | |
| ,, | | Bamboos ... | 525 | ... | | |
| | | | | | 1,021 | |
| Southern Division ... | Allapilly Depot ... | Teak logs ... | 3,130 | 39,042 | | |
| ,, | Do. ... | Teak sleepers ... | 3,345 | 11,377 | | |
| ,, | Do. ... | Teak scantlings ... | 8,002 | 8,571 | | |
| ,, | Do. ... | Teak planks ... | 3,048 | 4,438 | | |
| ,, | Do. ... | Hardoo planks ... | 267 | 44 | | |
| ,, | Do. ... | Hardoo logs ... | 13 | 186 | | |
| ,, | Do. .. | Teak squared piles ... | 44 | 1,506 | | |
| ,, | Do. ... | Teak slabs ... | 1,070 | 9,674 | | |
| ,, | Do. ... | Saj logs ... | 41 | 537 | | |
| ,, | Moharli ... | Teak khakers ... | 268 | ... | | |
| ,, | Do. ... | Bamboos ... | 2,050 | ... | | |
| ,, | Do. ... | Junglewood prop ... | 500 | ... | | |
| | | | | | 21,778 | 75,375 |

No. 24—*Continued.*

| Name of River or Division. | Forest. | Description of Timber. | Pieces. | Cubic feet. | Totals of each River. | |
|---|---|---|---|---|---|---|
| | | | | | Pieces. | Cubic feet. |
| Eastern Division ... | Hathibari Depot ... | Teak logs ... | 17 | 330 | 17 | 330 |
| Central Division ... | Nagpur Depot ... | Salai logs ... | 15 | 260 | | |
| ,, | Kamptee do. ... | Saj golas ... | 23 | ... | | |
| ,, | Korai do. ... | Saj bullees ... | 67 | ... | | |
| ,, | Kamptee Depot ... | Do. ... | 11 | ... | | |
| ,, | Do. | Teak bullees ... | 2 | ... | | |
| ,, | Do. | Teak khakers ... | 12 | ... | | |
| ,, | Nagpur Depot ... | Thoonies ... | 8 | ... | | |
| ,, | Kamthi Depot ... | Teak pieces ... | 3 | ... | | |
| ,, | Do. | Bamboos ... | 2,866 | ... | | |
| ,, | Korai Depot ... | Do. ... | 38,352 | ... | 41,359 | 260 |
| Saugor Division ... | Garakota Depot ... | Teak logs ... | 41 | 329 | | |
| | Hathko do. ... | Teak bullees ... | 1,006 | ... | 1,047 | 329 |
| | | | Total ... | | 194,066 | 104,160 |

No. 25.

# FOREST DEPARTMENT, CENTRAL PROVINCES.

*Annual Timber Account for the year 1876-77.*

| Particulars. | Pieces. | Total. |
|---|---|---|
| *I.—Stock in hand at the following Divisions at the commencement of the year.* | | |
| Northern Division ... | 60,259 | |
| Western Division ... | 8,438 | |
| Southern Division ... | 30,811 | |
| Eastern Division ... | 80 | |
| Central Division ... | 11,427 | |
| Saugor Division ... | 163 | |
| | | 1,11,178 |
| *II.—Timber received at Divisions from the Forests during 1876-77 as per Form No. 24.* | | |
| Northern Division ... | 1,13,569 | |
| Western Division ... | 15,275 | |
| Pachmarhi Division ... | 1,021 | |
| Southern Division ... | 21,778 | |
| Eastern Division ... | 17 | |
| Central Division ... | 41,359 | |
| Saugor Division ... | 1,047 | |
| | | 1,94,066 |
| *III.—Excess in re-accounting.* | | |
| Northern Division ... | 2,649 | |
| | | 2,649 |
| | | 3,07,893 |

| Particulars. | Pieces. | Total. |
|---|---|---|
| *Timber removed by purchasers from Divisions.* | | |
| Northern Division ... | 19,109 | |
| Western Division ... | 15,601 | |
| Pachmarhi Division ... | 2,089 | |
| Southern Division ... | 8,934 | |
| Eastern Division ... | 18 | |
| Central Division ... | 34,596 | |
| Saugor Division ... | 198 | |
| | | 80,545 |
| *Timber lost and converted.* | | |
| Northern Division ... | 9,801 | |
| Western Division ... | 53 | |
| Pachmarhi Division ... | 123 | |
| Southern Division ... | 3,831 | |
| Eastern Division ... | 23 | |
| Central Division ... | 13,655 | |
| Saugor Division ... | ... | |
| | | 27,486 |
| *Stock in hand at the close of the year at the following Divisions:* | | |
| Northern Division ... | 1,47,567 | |
| Western Division ... | 808 | |
| Pachmarhi Division ... | 6,060 | |
| Southern Division ... | 39,824 | |
| Eastern Division ... | 56 | |
| Central Division ... | 4,535 | |
| Saugor Division ... | 1,012 | |
| | | 1,99,862 |
| | | 3,07,893 |

# FORM No. 25A.

## FOREST DEPARTMENT, CENTRAL PROVINCES.

*Abstract of Annual Timber Accounts for the year* 1876-77.

| Description of Timber. | Number of pieces. | Cubic feet. | | | Rate per 100 c. f. | Value. | | | Total. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Opening balance.* | | | | | | Rs. | a. | p. | Rs. | a. | p. |
| Teak logs ... | 11,010 | 1,49,021 | 0 | 0 | | 1,08,107 | 5 | 8 | | | |
| Sal sleepers ... | 2,622 | 9,113 | 0 | 0 | | 6,495 | 10 | 0 | | | |
| Teak sleepers ... | 4,174 | 12,912 | 0 | 0 | | 13,952 | 1 | 0 | | | |
| Sal logs ... | 1,324 | 39,108 | 0 | 0 | | 31,016 | 0 | 4 | | | |
| Hardoo sleepers ... | 169 | 219 | 0 | 0 | | 232 | 4 | 0 | | | |
| Teak logs, squared ... | 722 | 8,304 | 0 | 0 | | 14,630 | 2 | 1 | | | |
| Dowra sleepers ... | 24 | 31 | 0 | 0 | | 30 | 0 | 0 | | | |
| Bijasal sleepers ... | 79 | 102 | 0 | 0 | | 98 | 12 | 0 | | | |
| Teak scantlings ... | 19,569 | 22,462 | 0 | 0 | | 27,845 | 13 | 9 | | | |
| Teak planks ... | 2,592 | 2,746 | 0 | 0 | | 2,796 | 11 | 2 | | | |
| Shishum logs ... | 11 | 240 | 0 | 0 | | 180 | 2 | 0 | | | |
| Teak sleepers, length... | 7 | 60 | 0 | 0 | | 119 | 8 | 0 | | | |
| Bija logs ... | 10 | 480 | 0 | 0 | | 240 | 0 | 0 | | | |
| Saj logs ... | 8 | 322 | 0 | 0 | | 168 | 14 | 0 | | | |
| Saj bullees and golas ... | 1,675 | ... | ... | ... | | 1,570 | 4 | 0 | | | |
| Saj khakers ... | 1 | ... | ... | ... | | 0 | 7 | 0 | | | |
| Teak khakers ... | 309 | ... | ... | ... | | 61 | 12 | 9 | | | |
| Dhooras ... | 100 | ... | ... | ... | | 18 | 12 | 0 | | | |
| Bija and Dowra sleepers. | 612 | 816 | 0 | 0 | | 408 | 0 | 0 | | | |
| Teak piles ... | 36 | 1,158 | 0 | 0 | | 1,446 | 14 | 0 | | | |
| Teak logs, squared ... | 3 | 14 | 0 | 0 | | 18 | 1 | 5 | | | |
| Teak pieces ... | 24 | ... | ... | ... | | 0 | 2 | 0 | | | |
| Teak bullees ... | 154 | ... | ... | ... | | 134 | 4 | 0 | | | |
| Bamboos ... | 65,943 | ... | ... | ... | | 902 | 8 | 10 | | | |
| Total ... | 1,11,178 | 2,47,108 | 0 | 0 | | | | | 2,10,474 | 6 | 0 |

Rs. a. p. 85 2 8

| Description of Timber. | Number of pieces. | Cubic Feet. | | | Rate per 106 c. f. | Value. | | | Total. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Sales.* | | Rs. | a. | p. | | Rs. | a. | p. | | | |
| Teak logs ... | 465 | 5,551 | 0 | 0 | | 1,445 | 11 | 0 | | | |
| Sal sleepers ... | 2,511 | 8,789 | 0 | 0 | | 6,231 | 8 | 0 | | | |
| Teak sleepers ... | 3,142 | 9,816 | 0 | 0 | | 18,459 | 7 | 7 | | | |
| Sal logs ... | 130 | 1,701 | 0 | 0 | | 2,236 | 13 | 9 | | | |
| Hardoo sleepers ... | 28 | 36 | 0 | 0 | | 28 | 0 | 0 | | | |
| Teak logs, squared ... | 32 | 698 | 0 | 0 | | 1,473 | 12 | 1 | | | |
| Teak scantlings ... | 2,031 | 3,374 | 0 | 0 | | 5,680 | 5 | 6 | | | |
| Teak planks ... | 469 | 309 | 0 | 0 | | 434 | 14 | 2 | | | |
| Saj logs ... | 2 | 40 | 0 | 0 | | 14 | 0 | 0 | | | |
| Saj khakers ... | 1 | ... | ... | ... | | 0 | 7 | 0 | | | |
| Teak khakers ... | 442 | ... | ... | ... | | 147 | 9 | 7 | | | |
| Teak wood pieces ... | 23 | ... | ... | ... | | 16 | 5 | 0 | | | |
| Teak bullees ... | 148 | ... | ... | ... | | 50 | 8 | 0 | | | |
| Bullees ... | 180 | ... | ... | ... | | 6 | 0 | 0 | | | |
| Sal pieces ... | 1 | ... | ... | ... | | 2 | 0 | 0 | | | |
| Mulgas ... | 56 | ... | ... | ... | | 3 | 0 | 0 | | | |
| Boats ... | 10 | ... | ... | ... | | 165 | 0 | 0 | | | |
| Anjan sleepers ... | 105 | 131 | 0 | 0 | | 236 | 4 | 0 | | | |
| Teak wood in pieces ... | 14,671 | ... | ... | ... | | 2,636 | 12 | 2 | | | |
| Teak wood in jotees ... | 318 | ... | ... | ... | | 401 | 11 | 9 | | | |
| Teak wood, 2 bullocks cart load ... | 466 | ... | ... | ... | | 2,348 | 2 | 0 | | | |
| Teak wood, 4 do. ... | 28 | ... | ... | ... | | 211 | 8 | 0 | | | |
| Teak wood charputs ... | 37 | ... | ... | ... | | 17 | 12 | 0 | | | |
| Teak planks ... | 3 | ... | ... | ... | | 2 | 4 | 0 | | | |

Rs. a. p. 135 6 2

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Received during the year.* | | | | | | | | | | | | | | | | | | | | | | | | |
| Teak logs ... | 3,431 | 42,614 | 0 | 0 | 31,123 | 11 | 0 | | | | | | | | | | | | | | | | | |
| Sal sleepers ... | 1,421 | 5,083 | 0 | 0 | 1,510 | 6 | 0 | | | | | | | | | | | | | | | | | |
| Teak sleepers ... | 3,345 | 11,377 | 0 | 0 | 5,017 | 8 | 0 | | | | | | | | | | | | | | | | | |
| Sal logs . | 450 | 18,954 | 0 | 0 | 9,512 | 8 | 0 | | | | | | | | | | | | | | | | | |
| Sal logs squared ... | 8 | 78 | 0 | 0 | 39 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Teak scantlings ... | 8,002 | 8,571 | 0 | 0 | 4,883 | 15 | 5 | | | | | | | | | | | | | | | | | |
| Sal scantlings ... | 94 | 323 | 0 | 0 | 161 | 8 | 0 | | | | | | | | | | | | | | | | | |
| Teak planks ... | 3,048 | 4,438 | 0 | 0 | 2,326 | 9 | 5 | | | | | | | | | | | | | | | | | |
| Saj logs ... | 41 | 537 | 0 | 0 | 721 | 11 | 9 | | | | | | | | | | | | | | | | | |
| Teak khakers ... | 280 | ... | ... | ... | 84 | 15 | 7 | | | | | | | | | | | | | | | | | |
| Beeja and Dowra sleepers ... | 288 | 384 | 0 | 0 | 144 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Teak pieces ... | 337 | ... | ... | ... | 251 | 13 | 0 | | | | | | | | | | | | | | | | | |
| Teak bullees ... | 1,008 | ... | | ... | 507 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Bullees ... | 3,203 | ... | ... | ... | 40 | 0 | 6 | | | | | | | | | | | | | | | | | |
| Sal pieces ... | 1 | ... | ... | ... | 2 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Mulgas ... | 56 | . . | ... | | 3 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Boats ... | 26 | | ... | ... | 260 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Aunjan sleepers . | 105 | 131 | 0 | 0 | 236 | 4 | 0 | | | | | | | | | | | | | | | | | |
| Teak wood in pieces . | 14,671 | ... | ... | . | 2,636 | 12 | 2 | | | | | | | | | | | | | | | | | |
| Teak wood in jotees | 318 | ... | ... | | 401 | 11 | 9 | | | | | | | | | | | | | | | | | |
| Teak wood 2 bullocks cart loads ... | 466 | ... | | | 2,348 | 2 | 0 | | | | | | | | | | | | | | | | | |
| Teak wood 4 bullocks cart loads .. | 25 | ... | ... | | 211 | 8 | 0 | | | | | | | | | | | | | | | | | |
| Teak wood charputs ... | 37 | ... | ... | .. | 17 | 12 | 0 | | | | | | | | | | | | | | | | | |
| Teak planks ... | 3 | ... | .. | | 2 | 4 | 0 | | | | | | | | | | | | | | | | | |
| Teak wood head load... | 80 | ... | ... | ... | 7 | 10 | 0 | | | | | | | | | | | | | | | | | |
| Copsed teak wood do. | 30 | ... | .. | ... | 7 | 6 | 0 | | | | | | | | | | | | | | | | | |
| Bamboos head load ... | 33 | ... | ... | ... | 5 | 8 | 3 | | | | | | | | | | | | | | | | | |
| Hardoo plants ... | 267 | 44 | 0 | 0 | 55 | 8 | 3 | | | | | | | | | | | | | | | | | |
| Hardoo logs ... | 13 | 186 | 0 | 0 | 203 | 7 | 1 | | | | | | | | | | | | | | | | | |
| Teak squared piles ... | 44 | 1,506 | 0 | 0 | 1,882 | 5 | 5 | | | | | | | | | | | | | | | | | |
| Teak slabs . | 1,070 | 9,674 | 0 | 0 | 7,255 | 11 | 11 | | | | | | | | | | | | | | | | | |
| Jungle wood prop ... | 500 | ... | ... | ... | 371 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Salai logs ... | 15 | 260 | 0 | 0 | 130 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Saj golas ... | 23 | ... | ... | ... | 23 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Saj bullees ... | 78 | ... | ... | ... | 61 | 4 | 0 | | | | | | | | | | | | | | | | | |
| Thoonies .. | 8 | ... | ... | | 4 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Bamboos ... | 1,51,238 | | ... | ... | 1,253 | 4 | 3 | | | | | | | | | | | | | | | | | |
| Total ... | 1,94,066 | 1,04,160 | 0 | 0 | | | | Rs. 62 | a. 9 | p. 7 | | | | | | | | | | | | | | |
| | | | | | | | | | | | 73,704 | 1 | 9 | | | | | | | | | | | |
| Teak wood, head load .. | 80 | ... | ... | ... | 7 | 10 | 0 | | | | | | | | | | | | | | | | | |
| Copsed teak wood do. | 30 | ... | ... | ... | 7 | 6 | 0 | | | | | | | | | | | | | | | | | |
| Bamboos, head load ... | 33 | ... | ... | ... | 5 | 8 | 3 | | | | | | | | | | | | | | | | | |
| Hardoo planks ... | 267 | 44 | 0 | 0 | 55 | 8 | 3 | | | | | | | | | | | | | | | | | |
| Teak squared piles . | 74 | 2,468 | 0 | 0 | 6,786 | 10 | 2 | | | | | | | | | | | | | | | | | |
| Jungle wood prop ... | 500 | ... | ... | ... | 371 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Salai logs ... | 15 | 260 | 0 | 0 | 130 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Saj golas ... | 945 | ... | ... | ... | 705 | 2 | 6 | | | | | | | | | | | | | | | | | |
| Saj bullees . | 469 | ... | ... | ... | 301 | 12 | 0 | | | | | | | | | | | | | | | | | |
| Thoonees ... | 8 | ... | ... | ... | 4 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Teak logs round ... | 79 | 2,805 | 0 | 0 | 5,556 | 11 | 10 | | | | | | | | | | | | | | | | | |
| Bamboos .. | 52,746 | ... | ... | ... | 2,068 | 12 | 1 | | | | | | | | | | | | | | | | | |
| Total ... | 80,545 | 36,022 | 0 | 0 | | | | | | | 58,249 | 12 | 8 | | | | | | | | | | | |
| *Decrease on re-measurement &c.* | | | | | | | | | | | | | | | | | | | | | | | | |
| Teak logs ... | ... | 4 | 0 | 0 | 4 | 7 | 2 | | | | | | | | | | | | | | | | | |
| Teak planks ... | ... | 572 | 0 | 0 | 289 | 1 | 10 | | | | | | | | | | | | | | | | | |
| Sal logs ... | ... | 386 | 0 | 0 | 386 | 0 | 0 | Rs. 70 | a. 9 | p. 3 | | | | | | | | | | | | | | |
| Total .. | ... | 962 | 0 | 0 | | | | | | | 679 | 9 | 0 | | | | | | | | | | | |
| *Lost.* | | | | | | | | | | | | | | | | | | | | | | | | |
| Converted into scantlings. Teak logs ... | 3,770 | 79,415 | 0 | 0 | 59,561 | 2 | 11 | | | | | | | | | | | | | | | | | |
| Hardoo logs... | 11 | 150 | 0 | 0 | 157 | 6 | 2 | | | | | | | | | | | | | | | | | |
| Saj logs | 5 | 62 | 0 | 0 | 77 | 7 | 4 | | | | | | | | | | | | | | | | | |
| Lost in flood. Teak logs ... | 44 | 620 | 0 | 0 | 1,240 | 5 | 9 | | | | | | | | | | | | | | | | | |
| Saj bullees ... | 16 | ... | ... | ... | 16 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Teak khakers. | 79 | ... | ... | ... | 59 | 4 | 0 | | | | | | | | | | | | | | | | | |
| Saj golas ... | 26 | ... | ... | ... | 26 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Teak bullees.. | 2 | ... | ... | ... | 4 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Teak pieces... | 4 | ... | ... | ... | 3 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Bamboos ... | 6,989 | ... | ... | ... | 349 | 7 | 2 | | | | | | | | | | | | | | | | | |
| Burnt. Teak sleepers. | 44 | 57 | 0 | 0 | 16 | 8 | 0 | | | | | | | | | | | | | | | | | |
| Sal sleepers... | 27 | 35 | 0 | 0 | 10 | 2 | 0 | | | | | | | | | | | | | | | | | |
| Teak logs ... | 49 | 288 | 0 | 0 | 54 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Lost in Transit. Beeja and Dowra sleepers | 52 | 70 | 0 | 0 | 26 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Sal logs ... | 1 | 76 | 0 | 0 | 38 | 0 | 0 | | | | | | | | | | | | | | | | | |
| Bullees ... | 1,971 | ... | ... | ... | 24 | 10 | 2 | | | | | | | | | | | | | | | | | |
| Teak logs ... | 4 | 163 | 0 | 0 | 122 | 4 | 0 | | | | | | | | | | | | | | | | | |
| Bamboos ... | 7,528 | ... | ... | ... | 62 | 13 | 10 | Rs. 75 | a. 7 | p. 9 | | | | | | | | | | | | | | |

No. 25A.—(*Continued.*)

| Description of timber. | Number of pieces. | Cubic feet. | Rate per 100 cubic feet. | Value. | Total. |
|---|---|---|---|---|---|
| | | | | Rs. a. p. | Rs. a. p. |
| *Increase on re-measurement, &c.* | | | | | |
| Teak logs ... | ... | 100 0 0 | | 74 15 1 | Rs. a. p. 91 12 3 |
| Sal logs ... | ... | 7 0 0 | | 3 8 0 | |
| Teak squared piles ... | ... | 63 0 0 | | 78 2 1 | |
| Bamboos ... | 2,649 | ... ... | | 34 6 11 | |
| Total ... | 2,649 | 170 0 0 | | | 191 0 1 |
| Increase in the value of stock resulting on transfer from Forest to market depots. | ... | ... | ... | ... ... | 54,109 11 11 |

| Description of timber. | Number of pieces. | Cubic feet. | Rate per 100 cubic feet. | Value. | Total. |
|---|---|---|---|---|---|
| | | | | Rs. a. p. | Rs. a. p. |
| Used in repairing rest house. — Teak scantlings | 1 | 1 0 0 | | 0 13 4 | |
| Used in repairing rest house. — Saj golas .. | 32 | .. | ... | 24 0 0 | |
| Used in repairing rest house. — Saj bullees ... | 38 | ... | .. | 28 8 0 | |
| Used in repairing rest house. — Teak khakers. | 24 | ... | ... | 4 12 9 | |
| Used in repairing rest house. — Bamboos ... | 2,800 | ... | .. | 34 2 0 | |
| Used in repairing Chowki. — Bamboos. | 274 | . | .. | 3 8 11 | |
| Used in repairing carts. — Sal logs.. | 16 | 767 0 0 | | 445 0 0 | |
| Condemned — Sal logs ... | 23 | 288 0 0 | | 143 12 4 | |
| Condemned — Sal sleepers... | 4 | 10 0 0 | | 8 0 0 | |
| Condemned — Dhooras .. | 100 | ... | .. | 18 12 0 | |
| Condemned — Bamboos | 3,552 | . | . | 47 3 3 | |
| Total ... | 27,486 | 82,002 0 0 | | | 62,606 15 11 |
| *Closing balance.* | | | | | |
| Beeja and Dowra sleepers ... | 848 | 1,130 0 0 | | 1,060 0 0 | |
| Sal logs ... | 1,604 | 54,851 0 0 | | 49,569 12 0 | |
| Sal logs squared ... | 8 | 78 0 0 | | 39 0 0 | |
| Beeja logs ... | 10 | 480 0 0 | | 420 8 0 | |
| Saj logs ... | 42 | 757 0 0 | | 864 4 7 | |
| Teak logs ... | 9,058 | 73,537 0 0 | | 32,440 10 7 | Rs. a. p. 92 3 7 |
| Sal sleepers ... | 1,501 | 5362 0 0 | | 1,710 6 0 | |
| Bamboos ... | 1,45,941 | ... | . | 1,441 3 3 | |
| Sal scantlings ... | 94 | 323 0 0 | | 161 8 0 | |
| Bullees ... | 1,052 | ... | . | 13 2 4 | |
| Teak pieces ... | 334 | ... | .. | 247 4 0 | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | Boats | ... | 16 | ... | ... | ... | | 160 | 0 | 0 | | |
| | | | | | | | | | | | | Beejasal sleepers | ... | 79 | 102 | 0 | 0 | | 98 | 12 | 0 | | |
| | | | | | | | | | | | | Hardoo sleepers | ... | 141 | 183 | 0 | 0 | | 176 | 4 | 0 | | |
| | | | | | | | | | | | | Teak sleepers | ... | 4,333 | 14,416 | 0 | 0 | | 17,539 | 14 | 0 | | |
| | | | | | | | | | | | | Dowra sleepers | ... | 24 | 31 | 0 | 0 | | 30 | 0 | 0 | | |
| | | | | | | | | | | | | Teak scantlings | .. | 25,772 | 27,325 | 0 | 0 | | 29,031 | 10 | 7 | | |
| | | | | | | | | | | | | Teak logs, round | ... | 1,019 | 30,131 | 0 | 0 | | 54,633 | 15 | 9 | | |
| | | | | | | | | | | | | Shishum logs | ... | 11 | 240 | 0 | 0 | | 180 | 2 | 0 | | |
| | | | | | | | | | | | | Teak piles | ... | 3 | 98 | 0 | 0 | | 122 | 13 | 0 | | |
| | | | | | | | | | | | | Hardoo logs | .. | 2 | 37 | 0 | 0 | | 46 | 0 | 11 | | |
| | | | | | | | | | | | | Teak sleepers in length | . | 7 | 60 | 0 | 0 | | 119 | 8 | 0 | | |
| | | | | | | | | | | | | Teak logs, squared | ... | 739 | 7,426 | 0 | 0 | | 12,957 | 8 | 8 | | |
| | | | | | | | | | | | | Teak planks | ... | 4,848 | 6,211 | 0 | 0 | | 5,922 | 14 | 7 | | |
| | | | | | | | | | | | | Teak slabs | ... | 1,070 | 9,674 | 0 | 0 | | 7,255 | 11 | 11 | | |
| | | | | | | | | | | | | Saj golas | ... | 187 | ... | ... | .. | | 106 | 0 | 0 | | |
| | | | | | | | | | | | | Saj bullees | ... | 63 | ... | . | | | 63 | 0 | 0 | | |
| | | | | | | | | | | | | Teak khakers | ... | 44 | ... | | ... | | 22 | 0 | 0 | | |
| | | | | | | | | | | | | Teak bullee | | 1,012 | ... | ... | ... | | 509 | 0 | 0 | 2,16,942 | 14 | 2 |
| | | | | | | | | | | | | Total | ... | 1,99,862 | 2,32,452 | 0 | 0 | | | | | | |
| 3,07,893 | 3,51,438 | 0 | 0 | | | | | | | 3,38,479 | 3 | 9 | Grand Total | ... | 3,07,893 | 3,51,438 | 0 | 0 | | | | 3,38,479 | 3 | 9 |

| | | Rs. | a. | p. | |
|---|---|---|---|---|---|
| NOTE.—Value of stock at commencement of the year | ... ... | 2,10,474 | 6 | 0 | |
| Value of stock at close of the year | .. . | 2,16,942 | 14 | 2 | |
| Difference | ... | 6,468 | 8 | 2 | In favour of the year. |

No. 25 B.

## FOREST DEPARTMENT, CENTRAL PROVINCES.

*Abstract showing the value of live and dead stock for the year* 1876-77.

| | On hand at the commencement of the year. | | | | Value of receipts during the year. | | | | Total. | | | | Loss by deaths and deterioration &c. | | | | Value of balance at close of the year. | | | | Allowance for deterioration. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No. | Value. | | | No. | Value. | | | No. | Value | | | No | Value. | | | No. | Value. | | | |
| | | Rs. | A. | P. | | Rs. | A. | P. | | Rs. | A. | P. | | Rs. | A. | P. | | Rs. | A. | P. | |
| Elephants ... | 8 | 10,602 | 0 | 0 | ... | ... | ... | ... | 8 | 10,602 | 0 | 0 | 1 | 2,680 | 3 | 2 | 7 | 7,921 | 12 | 10 | At 10 per cent per annum. |
| Other live stock ... | 199 | 1,999 | 9 | 10 | 14 | 460 | 6 | 0 | 213 | 2,459 | 9 | 10 | 26 | 743 | 4 | 6 | 187 | 1,716 | 5 | 4 | At 20 per cent per annum. |
| Machinery ... | ... | 8,904 | 11 | 7 | ... | ... | ... | ... | ... | 8,904 | 11 | 7 | ... | 890 | 7 | 6 | ... | 8,014 | 4 | 1 | At 10 per cent per annum. |
| Other dead stock ... | ... | 28,439 | 14 | 0 | ... | 1,865 | 8 | 0 | ... | 30,305 | 6 | 0 | ... | 6,290 | 2 | 2 | ... | 24,015 | 3 | 10 | At 10 per cent per annum. |
| Total ... | ... | 49,946 | 3 | 5 | ... | 2,325 | 8 | 0 | ... | 52,271 | 11 | 5 | ... | 10,604 | 1 | 4 | ... | 41,667 | 10 | 1 | |

| | | | | | |
|---|---|---|---|---|---|
| NOTE.—Value of stock at commencement of the year | ... | Rs. | 49,946 | 3 | 5 |
| Value of stock at close of the year | ... | „ | 41,667 | 10 | 1 |
| Difference | ... | „ | 8,278 | 9 | 4 against the year. |
| Deduct difference in value of Timber stock *vide* Form No. 25 A. | | „ | 6,468 | 8 | 2 |
| Net difference in value of all stock | ... | „ | 1,810 | 2 | 1 against the year. |

FORM No. 26.

## FOREST DEPARTMENT, CENTRAL PROVINCES.

*Statement showing the amount realized on account of different classes of Timber sold during the year* 1876-77.

| Divisions. | | No. of logs &c., sold | Cubical contents | | | Amount realized on account of timber &c., sold. | | | Average amount per 100 cubic feet | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Rs. | a. | p. | Rs. | a. | p. |
| Northern Division | Sal logs | 130 | 1,701 | 0 | 0 | 2,236 | 13 | 9 | 131 | 8 | 0 |
| | Teak logs | 15 | 186 | 0 | 0 | 279 | 3 | 10 | 150 | 2 | 0 |
| | Sal sleepers | 2,511 | 8,789 | 0 | 0 | 6,231 | 8 | 0 | 70 | 14 | 5 |
| | Bamboos | 16,206 | ... | ... | ... | 239 | 7 | 0 | ... | ... | ... |
| | Sal sleepers | 1 | ... | ... | ... | 2 | 0 | 0 | ... | ... | ... |
| | Bullees | 180 | ... | ... | ... | 6 | 0 | 0 | ... | ... | ... |
| | Mulgas | 56 | ... | ... | ... | 3 | 0 | 0 | ... | ... | ... |
| | Boats | 10 | ... | ... | ... | 165 | 0 | 0 | ... | ... | ... |
| Western Division | Teak logs | 326 | 4,000 | 0 | 0 | 450 | 0 | 0 | 45 | 0 | 0 |
| | Anjan sleepers | 105 | 131 | 0 | 0 | 236 | 4 | 0 | 180 | 5 | 5 |
| | Teak wood in pieces | 14,671 | ... | ... | ... | 2,636 | 12 | 2 | ... | ... | ... |
| | Do. in jotees | 7 | ... | ... | ... | 8 | 12 | 0 | ... | .. | ... |
| | Do. 2 bullocks cart load | 464 | ... | ... | ... | 2,342 | 2 | 0 | ... | ... | .. |
| | Do. 4 do. do. | 28 | ... | ... | ... | 211 | 8 | 0 | ... | .. | ... |
| Pachmarhi Division | Teak logs | 32 | 273 | 0 | 0 | 32 | 2 | 3 | 11 | 12 | 4 |
| | Hardoo sleepers | 28 | 36 | 0 | 0 | 28 | 0 | 0 | 77 | 12 | 5 |
| | Bamboos | 1,533 | ... | ... | ... | 64 | 11 | 0 | ... | ... | ... |
| | Teak wood in jotees | 311 | ... | ... | ... | 392 | 15 | 9 | ... | ... | .. |
| | Do. 2 bullocks cart load | 2 | ... | ... | ... | 6 | 0 | 0 | ... | ... | ... |
| | Do. charputs | 37 | .. | ... | ... | 17 | 12 | 0 | ... | .. | ... |
| | Teak planks | 3 | ... | ... | ... | 2 | 4 | 0 | ... | ... | ... |
| | Do. wood head load | 80 | ... | ... | ... | 7 | 10 | 0 | ... | .. | .. |
| | Copsed do. | 30 | .. | ... | ... | 7 | 6 | 0 | ... | ... | .. |
| | Bamboos do. | 33 | ... | ... | .. | 5 | 8 | 3 | ... | ... | .. |
| Southern Division | Teak logs | 22 | 208 | 0 | 0 | 156 | 2 | 1 | 75 | 1 | 0 |
| | Do. scantlings | 2,031 | 3,374 | 0 | 0 | 5,680 | 5 | 6 | 168 | 5 | 0 |
| | Do. logs, round | 79 | 2,805 | 0 | 0 | 5,556 | 11 | 10 | 198 | 1 | 7 |
| | Do. do. squared | 32 | 698 | 0 | 0 | 1,473 | 12 | 1 | 211 | 2 | 2 |
| | Do. squared piles | 74 | 2,468 | 0 | 0 | 6,786 | 10 | 2 | 274 | 15 | 9 |
| | Do. sleepers | 3,142 | 9,816 | 0 | 0 | 18,459 | 7 | 7 | 188 | 0 | 10 |
| | Do. planks | 469 | 309 | 0 | 0 | 434 | 14 | 2 | 140 | 11 | 10 |
| | Hardoo planks | 267 | 44 | 0 | 0 | 55 | 8 | 3 | 126 | 2 | 0 |
| | Jungle wood prop | 500 | ... | ... | ... | 371 | 0 | 0 | ... | ... | . |
| | Teak Khakers | 268 | ... | .. | ... | 80 | 2 | 7 | ... | ... | ... |
| | Bamboos | 2,050 | ... | ... | ... | 102 | 8 | 0 | ... | .. | . |

| Remarks. | Rs. |
|---|---|
| Timber sold in previous years remaining unremoved at commencement of the year ... | 80,545 |
| Timber sold during the year ... | |
| Total ... | 80,545 |
| Timber remaining unremoved from depot by purchasers during the year ... | ... |
| Balance removed from depots by purchasers during the year .. | 80,545 |

No. 26.—*Continued.*

| Divisions. | | Number of logs, &c, sold. | Cubical contents. | | | Amount realized on account of Timber, &c, sold. | | | Average amount per 100 cubic feet. | | | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | |
| EASTERN DIVISION ... | Teak logs ... | 18 | 370 | 0 | 0 | 237 | 3 | 10 | 64 | 1 | 10 | |
| CENTRAL DIVISION ... | Salai logs ... | 15 | 260 | 0 | 0 | 130 | 0 | 0 | 50 | 0 | 0 | |
| | Saj golas .. | 809 | ... | ... | ... | 435 | 2 | 6 | ... | ... | .. | |
| | Saj bullees ... | 469 | ... | .. | ... | 301 | 12 | 0 | ... | ... | ... | |
| | Teak bullees ... | 2 | ... | ... | ... | 4 | 0 | 0 | ... | ... | ... | |
| | Teak khakers ... | 174 | ... | ... | ... | 67 | 7 | 0 | ... | ... | ... | |
| | Thoonies ... | 8 | ... | ... | ... | 4 | 0 | 0 | ... | ... | ... | |
| | Teak pieces ... | 23 | ... | ... | ... | 16 | 5 | 0 | ... | ... | ... | |
| | Saj khakers ... | 1 | ... | ... | ... | 0 | 7 | 0 | .... | ... | ... | |
| | Saj logs ... | 2 | 40 | 0 | 0 | 14 | 0 | 0 | 35 | 0 | 0 | |
| | Saj golas ... | 136 | ... | ... | .. | 270 | 0 | 0 | ... | ... | ... | |
| | Bamboos ... | 32,957 | ... | ... | ... | 1,662 | 2 | 1 | ... | ... | ... | |
| SAUGOR DIVISION ... | Teak logs ... | 52 | 514 | 0 | 0 | 290 | 15 | 0 | 56 | 9 | 7 | |
| | Teak bullees ... | 146 | ... | ... | ... | 46 | 8 | 0 | ... | ... | ... | |
| | Total ... | 80,545 | 36,022 | 0 | 0 | 58,249 | 12 | 8 | ... | ... | ... | |
| | | Deduct amount due but not realized during the year ... | | | | 2,996 | 13 | 11 | | | | |
| | | Balance ... | | | | 55,252 | 14 | 9 | | | | |
| | | Add amount realized on account of former years. | | | | 63,373 | 6 | 1 | | | | |
| | | Add amount collected by District Officers ... | | | | 3,614 | 13 | 2 | | | | |
| | | Total ... | | | | 1,22,241 | 2 | 0 | As per Revenue Head R 1*a*,—Form No. 21. | | | |

No. 27.

# FOREST DEPARTMENT, CENTRAL PROVINCES.

*Statement showing the amount expended on account of Timber brought on stock in the different Forest Divisions during the year* 1876-77.

| Name of Division. | Description of logs. | Number of logs. | Cubical contents. | | | Timber expended. | | | Cost of establishment. | | | Total amount expended. | | | Average amount per 100 cubic feet. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. | R. | a. | p. |
| Northern Division.. | Beeja and Dowra sleepers .. | 288 | 384 | 0 | 0 | 145 | 12 | 0 | ... | ... | ... | 145 | 12 | 0 | 38 | 1 | 3 |
| | Sal logs ... | 450 | 18,954 | 0 | 0 | 3,149 | 9 | 11 | 273 | 13 | 4 | 3,423 | 7 | 3 | 18 | 10 | 4 |
| | Teak logs ... | 243 | 2,913 | 0 | 0 | 264 | 7 | 6 | ... | ... | ... | 264 | 7 | 6 | 9 | 1 | 3 |
| | Teak logs, squared ... | 8 | 78 | 0 | 0 | 4 | 8 | 0 | ... | ... | ... | 4 | 8 | 0 | 5 | 12 | 3 |
| | Sal sleepers, 6′×8″×4½″ .. | 3 | 11 | 0 | 0 | 456 | 6 | 0 | ... | ... | ... | 456 | 6 | 0 | 8 | 15 | 11 |
| | Sal sleepers, 10′×10″×5″ .. | 1,418 | 5,072 | 0 | 0 | | | | | | | | | | | | |
| | Bullees .. | 3,203 | ... | . | | 45 | 5 | 0 | ... | ... | ... | 45 | 5 | 0 | ... | ... | ... |
| | Sal scantlings .. | 94 | 323 | 0 | 0 | 29 | 1 | 9 | . | ... | ... | 29 | 1 | 9 | 9 | 0 | 2 |
| | Sal pieces - | 1 | ... | .. | . | . | ... | ... | ... | ... | ... | ... | ... | ... | . | .. | ... |
| | Mulgas ... | 56 | .. | . | ... | ... | .. | | ... | ... | ... | ... | | ... | ... | ... | ... |
| | Teak pieces ... | 334 | ... | ... | ... | 67 | 5 | 9 | ... | ... | ... | 67 | 5 | 9 | ... | .. | ... |
| | Bamboos ... | 1,07,445 | ... | ... | .. | 725 | 4 | 1 | 121 | 0 | 0 | 846 | 4 | 1 | ... | ... | ... |
| | Boats ... | 26 | ... | ... | .. | 178 | 9 | 7 | ... | ... | ... | 178 | 9 | 7 | .. | ... | ... |
| Western Division .. | Anjun sleepers ... | 105 | 131 | 0 | 0 | 118 | 3 | 5 | . | .. | ... | 118 | 3 | 5 | 90 | 3 | 9 |
| | Teakwood in pieces ... | 14,671 | ... | .. | .. | 1,252 | 8 | 10 | ... | ... | ... | 1,252 | 8 | 10 | ... | ... | ... |
| | Teakwood Jotees, loads ... | 7 | ... | ... | ... | | | | | | | | | | | | |
| | Do. 2 bullocks cart load.. | 464 | ... | ... | .. | | | | | | | | | | | | |
| | Do. 4 do. do. ... | 28 | ... | .. | ... | | | | | | | | | | | | |
| Pachmarhi Division. | Teakwood Jotees, load ... | 311 | ... | ... | .. | | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Do. bullocks cart load .. | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Do. in charputs ... | 37 | ... | ... | ... | ... | . | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Teak planks ... | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. |
| | Teakwood, head load .. | 80 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Copsed do. | 30 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Bamboos, head loads | 33 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | . |
| | Bamboos . | 525 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | .. | ... |
| Southern Division . | Teak logs .. | 3,130 | 39,042 | 0 | 0 | 5,890 | 6 | 4 | 2,949 | 12 | 3 | 8,840 | 2 | 7 | 26 | 2 | 11 |
| | Hardoo logs ... | 13 | 186 | 0 | 0 | | | | | | | | | | | | |
| | Saj logs . | 41 | 537 | 0 | 0 | | | | | | | | | | | | |
| | Teak scantlings .. | 8,002 | 8,571 | 0 | 0 | 9,044 | 3 | 9 | 4,522 | 1 | 11 | 13,566 | 5 | 8 | 57 | 6 | 7 |
| | Teak planks . | 3,048 | 4,438 | 0 | 0 | | | | | | | | | | | | |
| | Hardoo planks . | 267 | 44 | 0 | 0 | | | | | | | | | | | | |
| | Teak sleepers .. | 3,345 | 11,377 | 0 | 0 | | | | | | | | | | | | |
| | Teak squared piles ... | 44 | 1,506 | 0 | 0 | | | | | | | | | | | | |
| | Teak slabs | 1,070 | 9,674 | 0 | 0 | | | | | | | | | | | | |
| | Teak khakers ... | 268 | ... | ... | ... | 37 | 12 | 0 | 19 | 0 | 6 | 56 | 12 | 6 | ... | ... | ... |
| | Bamboos ... | 2,050 | ... | .. | | | | | | | | | | | | | |
| | Jungle wood prop ... | 500 | .. | ... | . | | | | | | | | | | | | |
| Eastern Division | Teak logs ... | 17 | 330 | 0 | 0 | ... | .. | .. | ... | .. | ... | ... | ... | ... | ... | ... | ... |
| Central Division ... | Salai logs ... | 15 | 260 | 0 | 0 | 7 | 8 | 0 | 3 | 0 | 0 | 10 | 8 | 0 | ... | ... | ... |
| | Saj golas ... | 23 | ... | .. | .. | ... | .. | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... |
| | Saj bullees ... | 67 | ... | . | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Do. .. | 11 | ... | ... | .. | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... | ... |
| | Teak bullees ... | 2 | ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | .. | .. | ... | ... | ... |
| | Teak khakers ... | 12 | .. | ... | .. | ... | | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Thoonies ... | 8 | ... | ... | ... | 4 | 0 | 0 | ... | ... | ... | 4 | 0 | 0 | ... | ... | ... |
| | Teak pieces ... | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Bamboos ... | 41,218 | ... | ... | ... | 104 | 4 | 1 | 27 | 0 | 0 | 131 | 4 | 1 | ... | ... | ... |
| Saugor Division ... | Teak logs ... | 41 | 329 | 0 | 0 | 1 | 6 | 0 | 3 | 12 | 0 | 5 | 2 | 0 | ... | ... | ... |
| | Teak bullees ... | 1,006 | ... | .. | ... | 232 | 6 | 0 | 633 | 8 | 0 | 865 | 14 | 0 | ... | ... | ... |
| Total ... | | 1,94,066 | 1,04,160 | 0 | 0 | 21,759 | 0 | 0 | 8,553 | 0 | 0 | 30,312 | 0 | 0 | ... | ... | ... |

# FORM No. 27A.

## FOREST DEPARTMENT, CENTRAL PROVINCES.

*Statement showing the amount expended on the transport of Timber from Forest Depots to Stations during the year* 1876-77.

| Name of Division. | From. | To | Distance. | Number of pieces. | Cubical contents. | Timber expenses. | | | Cost of establishment. | | | Total amount expended. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Rs. | a. | p. | Rs. | a. | p. | Rs. | a. | p. |
| Northern Division | Kisli Forest | Tilri | 8 miles | 446 | 19,902 | 1,683 | 14 | 8 | 331 | 8 | 5 | 2,015 | 7 | 1 |
| | Tilri | do. | 13 ,, | 892 | 1,186 | 88 | 4 | 9 | ... | ... | ... | 88 | 4 | 9 |
| | Do. | Mandla | 30 ,, | 436 | 18,919 | 3,122 | 1 | 11 | 353 | 5 | 7 | 3,475 | 7 | 6 |
| | Do. | do. | ,, ,, | 74,908 | ... | 99 | 9 | 0 | ... | ... | ... | 99 | 9 | 0 |
| | Do. | do. | ,, ,, | 900 | 1,200 | 58 | 8 | 0 | ... | ... | ... | 58 | 8 | 0 |
| | Do. | Ranidhar | 1 ,, | 26 | 1,430 | 17 | 14 | 0 | ... | ... | ... | 17 | 14 | 0 |
| | Gungar | Tilri | 11 ,, | 3 | 76 | 54 | 3 | 3 | ... | ... | ... | 54 | 3 | 3 |
| | Do. | Mocha, &c. | 5 ,, | 25,800 | ... | 91 | 5 | 6 | ... | ... | ... | 91 | 5 | 6 |
| | Mandla | Sakrighat | 6 ,, | 428 | 18,567 | 1,062 | 6 | 3 | 104 | 15 | 11 | 1,167 | 6 | 2 |
| | Do. | do. | ,, ,, | 17 | 315 | 12 | 0 | 9 | ... | ... | ... | 12 | 0 | 9 |
| | Do. | do. | ,, ,, | 63,425 | ... | 251 | 5 | 2 | 52 | 4 | 10 | 303 | 10 | 0 |
| | Do. | Gowarighat | 81 ,, | 145 | 2,484 | 70 | 5 | 6 | ... | ... | ... | 70 | 5 | 6 |
| | Do. | do. | ,, ,, | 848 | 1,130 | 67 | 12 | 11 | ... | ... | ... | 67 | 12 | 11 |
| | Sakrighat | do. | 75 ,, | 462 | 12,734 | 2,221 | 5 | 10 | 110 | 0 | 6 | 2,331 | 6 | 4 |
| | Do. | do. | ,, ,, | 46,823 | ... | 36 | 9 | 9 | ... | ... | ... | 36 | 9 | 9 |
| | Gowarighat | Jubbulpore | 5 ,, | 280 | 980 | 149 | 6 | 0 | ... | ... | ... | 149 | 6 | 0 |
| | Bisander | Mandla | 45 ,, | 148 | 2,535 | 115 | 14 | 3 | ... | ... | ... | 115 | 14 | 3 |
| | Barala Forest | Gowarighat | 25 ,, | 348 | ... | 77 | 5 | 0 | ... | ... | ... | 77 | 5 | 0 |
| | Do. | do. | ,, ,, | 180 | ... | 1 | 0 | 0 | ... | ... | ... | 1 | 0 | 0 |
| Western Div. | Bakhatgarh | Mortaka | 15 ,, | 105 | 131 | 22 | 15 | 6 | ... | ... | ... | 22 | 15 | 6 |
| Southern Division | Talwara | Allapilly | 8 ,, | 177 | 2,672 | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Do. | do. | ,, ,, | 3 | 73 | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Allapilly | Gurhari | 6 ,, | 76 | 1,955 | 23 | 7 | 5 | 11 | 11 | 8 | 35 | 3 | 1 |
| | Do. | do. | 6 ,, | 486 | 1,043 | 9 | 14 | 9 | 4 | 15 | 4 | 14 | 14 | 1 |
| | Do. | Chichagondi | 8 ,, | 986 | 3,724 | 94 | 2 | 6 | 47 | 1 | 3 | 141 | 3 | 9 |
| | Do. | do. | ,, ,, | 200 | 4,810 | 52 | 1 | 7 | 26 | 0 | 9 | 78 | 2 | 4 |
| | Do. | do. | ,, ,, | 4,178 | 3,089 | 52 | 6 | 8 | 26 | 3 | 4 | 78 | 10 | 0 |
| | Do. | do. | ,, ,, | 1,194 | 1,788 | 44 | 15 | 2 | 22 | 7 | 7 | 67 | 6 | 9 |
| | Do. | Wangapilly | 10 ,, | 456 | 577 | 35 | 7 | 4 | 17 | 11 | 8 | 53 | 3 | 0 |
| | Do. | do. | ,, ,, | 410 | 801 | | | | | | | | | |
| | Do. | do. | ,, ,, | 310 | 1,076 | 40 | 12 | 1 | 20 | 6 | 5 | 61 | 3 | 4 |
| | Do. | Kirmiri | 40 ,, | 179 | 364 | 193 | 6 | 8 | 96 | 11 | 6 | 290 | 2 | 0 |
| | Do. | do. | ,, ,, | 36 | 1,316 | 88 | 9 | 1 | 44 | 4 | 6 | 132 | 13 | 7 |
| | Do. | do. | ,, ,, | 869 | 1,347 | 246 | 14 | 4 | 123 | 7 | 2 | 3 70 | 5 | 6 |
| | Do. | do. | ,, ,, | 2,204 | 6,948 | 2,782 | 4 | 9 | 1,391 | 2 | 4 | 4,173 | 7 | 1 |
| | Do. | Chanda | 70 ,, | 36 | 1,152 | 137 | 9 | 9 | 68 | 12 | 10 | 206 | 6 | 7 |
| | Do. | Warora | 98 ,, | 364 | 782 | 27 | 7 | 6 | 13 | 11 | 9 | 41 | 3 | 3 |
| | Do. | do. | ,, ,, | 5 | 100 | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Do. | Nagpur | 164 ,, | 323 | 85 | 142 | 11 | 8 | 71 | 5 | 10 | 214 | 1 | 6 |
| | Do. | do. | ,, ,, | 267 | 44 | | | | | | | | | |
| | Gurh Ahiri | Kirmiri | 32 ,, | 486 | 1,043 | 113 | 8 | 8 | 56 | 12 | 4 | 170 | 5 | 0 |
| | Do. | do. | ,, ,, | 76 | 1,955 | 154 | 4 | 2 | 77 | 2 | 1 | 231 | 6 | 3 |
| | Chichagondi | do. | 30 ,, | 121 | 2,990 | 457 | 15 | 4 | 228 | 15 | 8 | 686 | 15 | 0 |
| | Do. | do. | ,, ,, | 147 | 673 | 42 | 13 | 9 | 21 | 6 | 10 | 64 | 4 | 7 |
| | Do. | do. | ,, ,, | 345 | 1,198 | 217 | 3 | 1 | 108 | 1 | 6 | 325 | 4 | 7 |
| | Wangapilly | do. | 28 ,, | 54 | 1,952 | 200 | 0 | 0 | 100 | 0 | 0 | 300 | 0 | 0 |
| | Do. | do. | ,, ,, | 268 | 930 | 37 | 6 | 7 | 18 | 11 | 4 | 56 | 1 | 11 |
| | Do. | do. | ,, ,, | 266 | 360 | 3 | 13 | 2 | 1 | 14 | 7 | 5 | 11 | 9 |
| | Do. | do. | ,, ,, | 2,453 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Kirmiri | Balarpur. | 46 ,, | 3,597 | 11,705 | 393 | 93 | 10 | 196 | 14 | 11 | 590 | 12 | 9 |
| | Do. | do. | ,, ,, | 756 | 1,655 | 48 | 11 | 1 | 24 | 5 | 6 | 73 | 0 | 7 |
| | Do. | do. | ,, ,, | 902 | 1,656 | 63 | 13 | 1 | 31 | 14 | 7 | 95 | 11 | 8 |
| | Do. | do. | ,, ,, | 254 | 7,058 | 200 | 0 | 0 | 100 | 0 | 0 | 300 | 0 | 0 |
| | Do. | do. | ,, ,, | 80 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Do. | do. | ,, ,, | 33 | 1,156 | 135 | 7 | 1 | 67 | 11 | 7 | 203 | 2 | 8 |
| | Balarpur | Tulana | 46 ,, | 5,728 | 18,538 | 907 | 15 | 3 | 453 | 14 | 8 | 1,361 | 13 | 11 |
| | Do. | do. | ,, ,, | 595 | 18,556 | 2,437 | 3 | 3 | 1,218 | 9 | 8 | 3,655 | 12 | 11 |
| | Do. | do. | ,, ,, | 728 | 1,565 | 46 | 6 | 2 | 23 | 3 | 1 | 69 | 9 | 3 |
| | Do. | do. | ,, ,, | 897 | 1,332 | 31 | 6 | 0 | 15 | 11 | 0 | 47 | 1 | 0 |
| | Do. | do. | ,, ,, | 33 | 1,157 | 169 | 8 | 5 | 84 | 12 | 2 | 254 | 4 | 7 |
| | Do. | Chanda | 6 ,, | 514 | 1,236 | 22 | 14 | 8 | 11 | 7 | 4 | 34 | 0 | 0 |
| | Chanda | Pothra | 40 ,, | 14 | 440 | 108 | 2 | 8 | 54 | 1 | 4 | 162 | 4 | 0 |
| | Do. | Tulana | 46 ,, | 22 | 711 | 122 | 10 | 2 | 61 | 5 | 1 | 183 | 15 | 3 |
| | Tulana | Railway line | 6 ,, | 3,134 | 9,791 | 412 | 7 | 3 | 206 | 3 | 8 | 618 | 10 | 11 |
| | Do. | Warora depot | 6 ,, | 3,195 | 10,443 | 267 | 10 | 1 | 133 | 13 | 0 | 401 | 7 | 1 |
| | Do. | do. | ,, ,, | 14,702 | 16,490 | 402 | 9 | 9 | 201 | 4 | 10 | 603 | 14 | 7 |
| | Do. | do. | ,, ,, | 1,603 | 2,666 | 1,135 | 1 | 3 | 567 | 8 | 8 | 1,702 | 9 | 11 |
| | Do. | do. | ,, ,, | 530 | 16,459 | | | | | | | | | |
| | Do. | do. | ,, ,, | 129 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Moharli | Warora | 20 ,, | 500 | ... | 111 | 12 | 0 | 54 | 14 | 0 | 167 | 10 | 0 |
| | Do. | do. | ,, ,, | 254 | ... | 63 | 15 | 0 | 31 | 15 | 6 | 95 | 14 | 6 |
| | Do. | do. | ,, ,, | 1,950 | ... | | | | | | | | | |
| | Borghat | Sorla | 46 ,, | 397 | 620 | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | Do. | do. | ,, ,, | 214 | 397 | 518 | 8 | 5 | 259 | 4 | 2 | 777 | 12 | 7 |
| | En route to | Coconada | ..... | 50 | 2,131 | | | | | | | | | |
| | Do. | do. | ..... | 100 | 180 | | | | | | | | | |
| | Do. | do. | ..... | 36 | 341 | | | | | | | | | |
| | Do. | do. | ..... | 900 | ... | | | | | | | | | |
| Central Division | Moda | Kamptee | 17 miles | 482 | 4,787 | 677 | 9 | 3 | 338 | 12 | 8 | 1,016 | 5 | 11 |
| | Kurai | do. | 48 ,, | 21,462 | ... | 691 | 12 | 2 | 12 | 0 | 0 | 703 | 12 | 2 |
| | Do. | Nagpur | 58 ,, | 8,067 | 260 | 259 | 2 | 2 | 6 | 0 | 0 | 265 | 2 | 2 |
| | Bagholi | do. | 42 ,, | 15 | ... | 41 | 4 | 0 | 0 | 8 | 0 | 41 | 12 | 0 |
| | Kurai | Kamptee | 48 ,, | 25 | ... | 14 | 10 | 0 | 0 | 4 | 0 | 14 | 14 | 0 |
| | Do. | Nagpur | 58 ,, | 20 | ... | 15 | 0 | 0 | 0 | 4 | 0 | 15 | 4 | 0 |
| | Do. | Kamptee | 48 ,, | 84 | ... | 18 | 6 | 0 | 0 | 6 | 0 | 18 | 12 | 0 |
| | Do. | Nagpur | 58 ,, | 8 | ... | 3 | 0 | 0 | 0 | 2 | 0 | 3 | 2 | 0 |
| | | | | | Total. | 23,824 | 3 | 10 | 7,709 | 8 | 9 | 31,533 | 12 | 7 |

# FORM No. 28.

*Annual Account of Forest Revenue for* 1876-77.

| Receipts. | Amount. | | | Disbursements. | Amount. | | |
|---|---|---|---|---|---|---|---|
| | Rs. | A. | P. | | Rs. | A. | P. |
| Amount of revenue realized in 1876-77, as per Form No. 21 .. | 6,61,326 | 1 | 6 | Amount disbursed in 1876-77, as per Form No. 21 | 2,88,640 | 6 | 10 |
| Deduct,— | | | | Deduct,— | | | |
| Amount realized on account of previous periods as per Form No. 23 A ... | 63,473 | 6 | 1 | Amount disbursed on account of transactions of former periods | | | . |
| Balance .. | 5,97,852 | 11 | 5 | Balance | 2,88,640 | 6 | 10 |
| Add,— | | | | Add,— | | | |
| Outstanding on account of the year as per Form No. 23 A .. | 5,004 | 0 | 10 | Amount due for transactions during the year under review, but not yet disbursed .. | ... | . | .. |
| Minus for bad debts „ | . | ... | ... | | | | |
| Value of the year's transactions .. | 6,02,856 | 12 | 3 | Real cost of the year's transactions .. | 2,88,640 | 6 | 10 |

| | Rs. | A. | P. |
|---|---|---|---|
| Value of the year's transactions . | 6,02,856 | 12 | 3 |
| Cost of the year's transactions | 2,88,640 | 6 | 10 |
| Balance . | 3,14,216 | 5 | 5 |
| Deduct difference between the value of Stock at the commencement and close of the year as per Form 25 A and 25 B. .. | 1,810 | 1 | 2 |
| Net results of the year .. | 3,12,406 | 4 | 3 |

N. B.—If at the close of the year the value of stock should be in excess of what it was at the beginning of the year, the sale value of the excess should be added to the net results, less such percentage on account of loss and deterioration as past experience has shown to be usual. Should, however, there be a deficiency at the close of the year, a deduction should be made, not of the price at which the stock was sold, but the sum (more or less) that it would take to replace it.

# FORM A.

*Area of Reserved Forests in the Central Provinces for* 1876-77.

| Division or Range. | Name of Forest. | Area on 1st April 1876. | | Added during the year. | | Excluded or transferred to other heads. | | Total on 31st March 1877 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Square miles. | Acres. | Square miles. | Acres. | Square miles. | Acres. | Square miles. | Acres. | |
| Northern ... | Jagmandal ... | 38 | 183· | ... | ... | ... | ... | 38 | 183· | Result of Survey. |
| | Choharigogarh ... | 2 | 380·94 | | ... | ... | ... | 2 | 380·94 | |
| | Banjar Valley ... | 77 | 445· | ... | ... | ... | ... | 77 | 445· | |
| | North Phen .. | 10 | 23· | ... | ... | ... | ... | 10 | 23· | |
| | South do. ... | 71 | 525· | ... | ... | ... | .. | 71 | 525· | |
| | Moteenala ... | 2 | 378· | ... | ... | ... | ... | 2 | 378· | |
| | Keolikapa ... | 9 | 536· | ... | ... | ... | ... | 9 | 536· | |
| | Topla ... | 70 | ... | ... | ... | ... | ... | 70 | ... | |
| | Bijeragogarh . | 33 | 68· | ... | ... | ... | ... | 33 | 68· | |
| | Barela ... | 10 | 46· | 1 | 67· | ... | ... | 11 | 113· | |
| | Singrampur ... | 10 | 155· | ... | ... | ... | ... | 10 | 155· | |
| | Airi ... | 3 | 230· | ... | ... | ... | .. | 3 | 230· | |
| Western ... | Kalibheet ... | 260 | .. | ... | ... | ... | .. | 260 | ... | |
| | Rajaborari ... | 250 | ... | ... | ... | ... | ... | 250 | .. | |
| | Saoligarh ... | 100 | ... | ... | ... | ... | ... | 100 | ... | |
| | Punassa ... | 143 | 200· | ... | ... | ... | ... | 143 | 200· | |
| Pachmarhi ... | Bori ... | 34 | ... | ... | ... | .. | ... | 37 | ... | |
| | Bowergarh ... | 118 | ... | ... | ... | ... | ... | 118 | ... | |
| | Kamapur ... | 166 | ... | ... | ... | ... | ... | 166 | ... | |
| Central ... | Satpura ... | 468 | 172· | ... | ... | ... | ... | 468 | 172· | |
| Southern ... | Bemaram ... | 19 | 136· | ... | ... | ... | ... | 19 | 136· | |
| | Mirkalloo ... | 13 | 159· | ... | ... | ... | ... | 13 | 159· | |
| | Mohurli ... | 300 | ... | 58 | 226· | ... | ... | 358 | 226· | |
| Eastern ... | Hathibari ... | 3 | 203·75 | ... | ... | ... | ... | 3 | 203·75 | |
| | Kuntra Nala ... | 5 | 348· | ... | ... | ... | ... | 5 | 348· | |
| Saugor ... | Garakota ... | 4 | 339· | ... | ... | ... | ... | 4 | 339· | |
| | Tigora ... | ... | 459· | ... | ... | ... | ... | ... | 459· | |
| | Ranjeer ... | 14 | 521· | ... | ... | ... | ... | 14 | 521· | |
| | Ranipura .. | 11 | 346· | ... | ... | ... | ... | 11 | 346· | |
| | Hatkoo .. | 28 | 638· | ... | ... | ... | ... | 28 | 638· | |
| Balaghat District ... | Pandratola ... | 7 | 480· | ... | ... | ... | ... | 7 | 480· | |
| Wardha ... | Dhuga .. | 22 | 91· | ... | ... | ... | ... | 22 | 91· | |
| | Erjhur ... | 18 | 291· | ... | ... | ... | .. | 18 | 291· | |
| | Total ... | 2,332 | 313·69 | 59 | 293· | ... | .. | 2,391 | 606·69 | |

# FORM B.

*Area of Unreserved Forests in the Central Provinces for* 1876-77.

| Division or Range. | Name of Districts. | Area on 1st April 1876. | | Added during the year. | | Excluded or transferred to other heads. | | Total on 31st March 1877. | |
|---|---|---|---|---|---|---|---|---|---|
| | | Square miles. | Acres. | Square miles. | Acres. | Square miles. | Acres. | Square miles. | Acres. |
| Southern ... | Nagpur ... | 390 | ... | ... | ... | .. | ... | 390 | ... |
| Central ... | Bhandara ... | 551 | ... | ... | ... | ... | ... | 551 | ... |
| Southern ... | Chanda ... | 2,104 | ... | ... | ... | 58 | 220 | 2,045 | 414 |
| Do. . | Wardha ... | 159 | 292 | ... | ... | ... | ... | 159 | 292 |
| Northern ... | Balaghat ... | 986 | 594 | ... | 438 | 12 | 36 | 975 | 356 |
| Southern ... | Upper Godavari District ... | 931 | 345 | ... | ... | ... | ... | 931 | 345 |
| Northern ... | Jubbulpore ... | 329 | 119 | ... | ... | ... | ... | 329 | 119 |
| Saugor ... | Saugor ... | 729 | 139 | ... | 314 | ... | ... | 729 | 453 |
| Northern ... | Damoh ... | 858 | ... | ... | ... | ... | ... | 858 | ... |
| Central ... | Seoni ... | 749 | 553 | ... | ... | ... | ... | 749 | 553 |
| Northern ... | Mandla ... | 2,113 | 510 | 4 | 324 | ... | ... | 2,118 | 194 |
| Pachmarhi ... | Betul ... | 860 | 240 | ... | ... | ... | ... | 860 | 240 |
| Central ... | Chhindwara ... | 642 | 79 | 2 | 39 | ... | ... | 644 | 118 |
| Western ... | Hoshangabad ... | 1,222 | 369 | ... | ... | ... | ... | 1,222 | 369 |
| Northern ... | Narsinghpur ... | 192 | 332 | ... | ... | ... | ... | 192 | 332 |
| Western ... | Nimar ... | 1,664 | 119 | ... | 575 | 4 | 328 | 1,660 | 366 |
| Eastern ... | Raipur ... | 1,377 | ... | ... | ... | ... | ... | 1,377 | ... |
| Do. .. | Sambalpur ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Do. ... | Bilaspur ... | 649 | ... | ... | .. | ... | ... | 649 | ... |
| | Total ... | 16,510 | 491 | 8 | 410 | 74 | 590 | 16,444 | 311 |

# FORM C.

*Prosecutions for breaches of the Forest rules in the Central Proinces for the* 1876-77.

| Nature of offences. | Injury done to forest by fire. | | Unauthorized felling or appropriation of timber. | | Unauthorised appropriation of minor forest produce. | | Grazing without permission or in tract in which grazing is prohibited. | | Unauthorised breaking up of forest land for cultivation. | | Total. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Forest Divisions and Civil Districts. | Number of cases. | Number of persons. | Number of cases. | Number of persons. | Number of cases. | Number of persons. | Number of cases. | Number of persons. | Number of cases. | Number of persons. | Number of prosecutions. | Number of persons. | Convictions obtained. Number of persons convicted. |
| Northern Division ... | ... | ... | 2 | 2 | 2 | 5 | 1 | 1 | ... | ... | 5 | 8 | 8 |
| Western " ... | ... | .. | 21 | 63 | 3 | 7 | 24 | 51 | 4 | 14 | 52 | 135 | 128 |
| Southern " ... | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Central " ... | ... | ... | 2 | 6 | ... | ... | ... | .. | ... | ... | 2 | 6 | 6 |
| Eastern " ... | .. | . | ... | ... | ... | .. | ... | ... | ... | ... | ... | ... | ... |
| Saugor " ... | 1 | 7 | 4 | 4 | 2 | 5 | 1 | 3 | ... | ... | 8 | 19 | 17 |
| Total ... | 1 | 7 | 29 | 75 | 7 | 17 | 26 | 55 | 4 | 14 | 67 | 168 | 159 |
| Nagpur District ... | ... | .. | 1 | 1 | ... | ... | ... | ... | 1 | 1 | 2 | 2 | 1 |
| Bhandara " ... | ... | ... | 17 | 39 | ... | ... | ... | ... | ... | ... | 17 | 39 | 29 |
| Chanda " ... | ... | ... | 25 | 59 | ... | ... | ... | ... | 1 | 4 | 26 | 63 | 48 |
| Wardha " ... | ... | ... | 6 | 28 | ... | ... | 1 | 1 | ... | ... | 7 | 29 | 9 |
| Bálaghat " ... | 1 | 2 | 5 | 5 | ... | ... | ... | ... | ... | ... | 6 | 7 | 6 |
| Upper Godavari " ... | ... | ... | 3 | 5 | ... | ... | ... | ... | ... | ... | 3 | 5 | 5 |
| Jubbulpore " ... | ... | ... | 19 | 42 | 6 | 41 | ... | ... | ... | ... | 25 | 83 | 58 |
| Saugor " ... | ... | ... | 56 | 100 | ... | ... | ... | ... | ... | ... | 56 | 100 | 85 |
| Damoh " ... | ... | ... | 15 | 27 | 1 | 1 | 1 | 1 | ... | ... | 17 | 29 | 23 |
| Seoni " ... | ... | ... | 26 | 58 | 5 | 6 | 3 | 9 | 1 | 2 | 35 | 75 | 46 |
| Mandla " ... | ... | ... | ... | ... | 4 | 5 | ... | ... | ... | ... | 4 | 5 | 2 |
| Betul " ... | ... | ... | 36 | 65 | ... | ... | ... | ... | 7 | 7 | 43 | 72 | 51 |
| Chhindwara " ... | .. | ... | 6 | 9 | 1 | 1 | ... | ... | ... | ... | 7 | 10 | 10 |
| Hoshangabad " ... | ... | ... | 21 | 46 | 7 | 8 | 25 | 47 | ... | ... | 53 | 101 | 64 |
| Narsinghpur " ... | ... | .. | 8 | 18 | ... | ... | 1 | 10 | ... | ... | 9 | 28 | 15 |
| Nimar " ... | ... | ... | 3 | 3 | 3 | 3 | ... | ... | ... | ... | 6 | 6 | 4 |
| Raipur " ... | ... | ... | 5 | 8 | ... | ... | ... | ... | 44 | 109 | 49 | 117 | 115 |
| Bilaspur " .. | | .. | 5 | 6 | 7 | 22 | ... | ... | ... | ... | 12 | 28 | *28 |
| Total .. | 1 | 2 | 257 | 519 | 34 | 87 | 31 | 68 | 54 | 123 | 377 | 799 | 599 |
| Grand Total ... | 2 | 9 | 286 | 594 | 41 | 104 | 57 | 123 | 58 | 137 | 444 | 967 | 758 |

* These convictions were subsequently quashed as illegal by the Judicial Commissioner.

# FORM D.

*Area of Forest tracts under protection from fire in the Central Provinces for the year 1876-77.*

| Division. | Forest tracts. | Area actually protected in 1875-76. | Total cost. | | | Additional area protected in 1876-77. | Amount expended in 1876-77. | | | Total area actually protected up to 1876-77. | Total expenditure incurred up to 1876-77. | | | Year when protection commenced. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Rs. | a. | p. | | Rs. | a. | p. | | Rs. | a. | p. | |
| Northern | Banjar Reserve | 49,725 | 444 | 13 | 1 | ... | 524 | 2 | 2 | 49,495 | 968 | 15 | 3 | From June 1875. |
| Do. | Motinala .. | 1,658 | ... | .. | . | . | 53 | 15 | 3 | 1,658 | 53 | 15 | 3 | Do. 1875. |
| Do. | Jagmandal | 24,503 | 16,480 | 7 | 8 | .. | 456 | 0 | 8 | 24,503 | 16,936 | 8 | 4 | Do. 1867. |
| Do. | Choharigogarh . | 1,661 | 4,288 | 12 | 11 | .. | 116 | 11 | 9 | 1,661 | 4,405 | 8 | 8 | Do. 1867. |
| Do. | Barela | 7,153 | 756 | 6 | 0 | ... | 134 | 14 | 0 | 7,153 | 891 | 4 | 6 | Do. 1872. |
| Do. | Singrampur . | 6,555 | 1,213 | 11 | 10 | . | 58 | 10 | 8 | 6,555 | 1,272 | 6 | 6 | Do. 1871. |
| Do. | Bijeragogarh . | 21,188 | 2,043 | 3 | 10 | . | 478 | 13 | 5 | 21,188 | 2,522 | 1 | 3 | Do. 1871. |
| Western | Kalibheet ... | 11,020 | 122 | 2 | 8 | 3,060 | 72 | 10 | 2 | 13,434 | 194 | 12 | 10 | Do. 1874. |
| Do. | Rajaborari .. | 7,580 | 302 | 9 | 11 | 55,960 | 376 | 15 | 4 | 63,540 | 679 | 7 | 3 | Do. 1875. |
| Do. | Saoligarh .. | 14,720 | 339 | 9 | 4 | 34,120 | 275 | 7 | 3 | 48,840 | 615 | 0 | 7 | Do. 1875. |
| Do | Punassa ... | 32,460 | 426 | 8 | 6 | 11,240 | 680 | 14 | 8 | 43,700 | 1,107 | 7 | 2 | Do. 1875. |
| Pachmarhi | Bori ... | 23,000 | 9,758 | 13 | 10 | 680 | 650 | 3 | 9 | 23,680 | 10,409 | 1 | 7 | Do. 1864. |
| Do. | Bówergarh ... | 22,400 | 756 | 15 | 2 | 12,160 | 342 | 1 | 0 | 34,560 | 1,099 | 0 | 2 | Do. 1875. |
| Do. | Kamapur ... | . | 24 | 12 | 3 | 15,680 | 55 | 14 | 0 | 15,680 | 80 | 10 | 3 | Do. 1876. |
| Central | Korai ... | 14,970 | 4,186 | 12 | 4 | 16,240 | 901 | 9 | 3 | 31,210 | 5,088 | 5 | 7 | Do. 1869. |
| Do. | East Pench. ... | 41,600 | 489 | 8 | 9 | 950 | 1,007 | 8 | 0 | 42,560 | 1,497 | 0 | 9 | Do. 1875. |
| Eastern | Hathibari ... | 2,123 | 2,106 | 5 | 9 | .. | 75 | 0 | 0 | 2,123 | 2,181 | 5 | 9 | Do. 1870. |
| Do. | Kuntra nala . ... | . | .. | . | | 3,548 | 75 | 0 | 0 | 3,548 | 75 | 0 | 0 | Do. 1876. |
| Southern | Bemaram . | 12,296 | 3,507 | 13 | 3 | ... | 1,005 | 1 | 4 | 12,296 | 4,512 | 14 | 7 | Do. 1872. |
| Do. | Mirkulloo ... | 5,268 | 553 | 7 | 3 | 3,211 | 994 | 3 | 2 | 8,479 | 1,547 | 10 | 5 | Do. 1875. |
| Do. | Taroba ... | 24,019 | 1,699 | 10 | 4 | 1,600 | 1,107 | 1 | 7 | 25,619 | 2,806 | 11 | 11 | Do. 1875 |
| Do. | Goverdhan .. | 13,817 | 982 | 7 | 3 | ... | 660 | 11 | 4 | 13,817 | 1,643 | 2 | 7 | Do. 1874. |
| Saugor | Garhakota | 2,899 | 38 | 7 | 6 | .. | 8 | 2 | 0 | 2,679 | 46 | 9 | 6 | Do. 1874. |
| Do. | Hathkoo . | 10,598 | 93 | 3 | 6 | .. | 199 | 9 | 6 | 10,148 | 292 | 13 | 0 | Do. 1874. |
| Do. | Renjir . | 1,987 | 17 | 8 | 3 | .. | 8 | 1 | 0 | 1,987 | 25 | 9 | 3 | Do. 1875. |
| Balaghat District | Pandratola . | 4,960 | .. | .. | .. | . | 31 | 0 | 0 | 4,960 | 31 | 0 | 0 | Do. 1872. |
| | Total .. | 3,58,160 | 50,634 | 3 | 2 | 1,58,459 | 10,350 | 3 | 9 | 5,15,073 | 60,984 | 6 | 11 | |

# FORM No. E.

*General State Forests Return of the Central Provinces, for the year 1876-77.*

| No. | Name of Forest. | Area in acres. | External boundary. Length in miles. | External boundary. Cost of maintenance. Rs. | A. | P. | Internal boundary. Length in miles. | Internal boundary. Cost of maintenance. Rs. | A. | P. | Number of cattle permitted to graze. | Population, including women and children. | Area protected from fire. | Area cleared of parasites and creepers. | Area in which mature timber has been cut. | Area from which bamboos and other minor products have been removed. | Total expenditure on forest, including share of Deputy Conservator's salary. Rs. | A. | P. | Income of the forest from all sources. Rs. | A. | P. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **NORTHERN DIVISION.** | | | | | | | | | | | | | | | | | | | | | |
| 1 | Jagmandal ... | 24,503 | 41·00 | 71 | 10 | 0 | ... | .. | | | ... | ... | 24,503 | ... | ... | ... | 3,890 | 9 | 6 | ... | ... | ... |
| 2 | Choharigogarh ... | 1,661 | 5·87 | 14 | 14 | 3 | ... | . | | | ... | ... | 1,661 | ... | ... | ... | 1,070 | 8 | 6 | 279 | 3 | 10 |
| 3 | Banjar Valley ... | 49,725 | 48·56 | 168 | 12 | 6 | .. | ... | | | ... | ... | 49,495 | ... | ... | ... | 25,375 | 11 | 11 | 2,715 | 11 | 11 |
| 4 | North Phen ... | 6,423 | 16·00 | | ... | ... | ... | ... | | | 3,719 | ... | ... | ... | ... | ... | 643 | 7 | 11 | 380 | 12 | 6 |
| 5 | South Phen ... | 45,965 | 38·00 | ... | ... | ... | ... | ... | ... | | ... | 76 | ... | ... | ... | ... | 643 | 7 | 11 | ... | ... | .. |
| 6 | Motinala ... | 1,658 | 7·12 | 18 | 12 | 0 | ... | .. | . | | ... | ... | 1,658 | ... | ... | ... | 723 | 3 | 9 | ... | ... | ... |
| 7 | Keolikhapa ... | 6,296 | 19·00 | | | ... | ... | ... | . | | 680 | ... | ... | ... | ... | ... | 668 | 12 | 11 | 68 | 0 | 0 |
| 8 | Topla ... | 44,800 | 36 00 | . | | .. | ... | ... | | | 3,128 | ... | ... | ... | ... | ... | 917 | 2 | 9 | 9,870 | 13 | 5 |
| 9 | Bijeragogarh ... | 21,188 | 56·19 | 152 | 12 | 1 | ... | | | . | ... | ... | 21,188 | ... | ... | ... | 3,494 | 11 | 11 | 88 | 3 | 9 |
| 10 | Barela ... | 7,153 | 14·12 | 37 | 3 | 0 | | . | | | ... | ... | 7,153 | ... | ... | ... | 2,097 | 8 | 6 | 39 | 8 | 7 |
| 11 | Singrampur .. | 6,555 | 22·50 | ... | | ... | . | | ... | | ... | ... | 6,555 | ... | ... | ... | 1,324 | 2 | 2 | 32 | 0 | 0 |
| 12 | Airi ... | 2,150 | ... | .. | | ... | ... | .. | | ... | ... | ... | ... | ... | ... | ... | 546 | 10 | 6 | ... | ... | ... |
| | **WESTERN DIVISION.** | | | | | | | | | | | | | | | | | | | | | |
| 13 | Kalibheet .. | 1,66,400 | 78 00 | 97 | 8 | 0 | ... | ... | | ... | 7,970 | 3,011 | 13,434 | ... | ... | 1,52,320 | 3,912 | 11 | 9 | 6,266 | 2 | 2 |
| 14 | Rajaborari .. | 1,60,000 | 139·00 | 93 | 13 | 9 | ... | ... | | | 27,071 | ... | 63,540 | ... | ... | 95,190 | 10,104 | 3 | 11 | 12,807 | 15 | 5 |
| 15 | Saoligarh ... | 64,000 | 100·00 | 52 | 7 | 0 | ... | .. | | | 13,432 | ... | 48,840 | ... | ... | 15,160 | 3,58- | 2 | 3 | 5,643 | 4 | 0 |
| 16 | Punassa ... | 91,720 | 81·00 | 55 | 12 | 0 | ... | ... | | .. | 4,889 | 290 | 43,700 | ... | ... | 48,020 | 7,509 | 8 | 4 | 4,517 | 4 | 6 |
| | **PACHMARHI DIVISION.** | | | | | | | | | | | | | | | | | | | | | |
| 17 | Bori ... | 23,680 | 28 25 | 110 | 5 | 6 | 19 25 | 169 | 14 | 0 | ... | ... | 23,680 | ... | ... | ... | 1,405 | 12 | 7 | 234 | 15 | 4 |
| 18 | Bowergarh ... | 75,520 | 73 60 | 145 | 12 | 1 | 15 00 | 29 | 0 | 5 | 7,525 | .. | 34,560 | ... | ... | 40,960 | 3,178 | 7 | 4 | 3,077 | 4 | 2 |
| 19 | Kamapur ... | 1 06,240 | 157 00 | 76 | 1 | 2 | 27·40 | 14 | 1 | 8 | 7,444 | 4,798 | 15,680 | . | ... | 90,560 | 4,743 | 7 | 8 | 6,091 | 6 | 0 |

## FORM No. E.—(Contd.)

| No. | Name of Forest. | Area in acres. | External boundary. Length in miles. | External boundary. Cost of maintenance. Rs. | A. | P. | Internal boundary. Length in miles. | Internal boundary. Cost of maintenance. Rs. | A. | P. | Number of cattle permitted to graze. | Population, including women and children. | Area protected from fire. | Area cleared of parasites and creepers. | Area in which mature timber has been cut. | Area from which bamboos and other minor products have been removed. | Total expenditure on forest, including share of Deputy Conservator's salary. Rs. | A. | P. | Income of the forest from all sources. Rs. | A. | P. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **CENTRAL DIVISION.** | | | | | | | | | | | | | | | | | | | | | |
| 20 | Satpura ... | 2,99,092 | 324·00 | 661 | 5 | 5 | ... | ... | ... | ... | 27,658 | 370 | 73,770 | 1,500 | ... | 225,922 | 20,288 | 7 | 7 | 16,765 | 11 | 11 |
| | **SOUTHERN DIVISION.** | | | | | | | | | | | | | | | | | | | | | |
| 21 | Bemaram ... | 12,296 | 28·50 | 60 | 4 | 8 | 7·00 | ... | ... | ... | ... | ... | 12,296 | ... | ... | ... | 45,622 | 9 | 9 | 96,243 | 13 | 0 |
| 22 | Mirkuloo ... | 8,479 | 31·56 | | | | 5·31 | ... | ... | ... | ... | ... | 8,479 | ... | ... | ... | | | | | | |
| 23 | Moharli ... | 2,29,346 | 131·00 | 141 | 0 | 3 | 33·00 | ... | ... | ... | 6,347 | 760 | 39,436 | ... | ... | ... | 15,758 | 14 | 4 | 13,373 | 15 | 5 |
| | **EASTERN DIVISION.** | | | | | | | | | | | | | | | | | | | | | |
| 24 | Hathibari ... | 2,123·75 | 7·50 | ... | ... | ... | ... | ... | ... | ... | ... | 33 | 2,123 | ... | ... | ... | 1,301 | 10 | 3 | 257 | 12 | 0 |
| 25 | Kuntrannla ... | 3,548 | 6·12 | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 3,548 | ... | ... | ... | 649 | 5 | 10 | ... | ... | ... |
| | **SAUGOR DIVISION.** | | | | | | | | | | | | | | | | | | | | | |
| 26 | Garhakota ... | 2,899 | 10·00 | 240 | 0 | 0 | ... | ... | ... | ... | ... | 3 | 2,679 | ... | ... | 2,899 | 1,607 | 12 | 7 | 1,502 | 12 | 3 |
| 27 | Tijora ... | 451 | 5·20 | 96 | 0 | 0 | ... | ... | ... | ... | 449 | ... | ... | ... | ... | 459 | 1,213 | 7 | 10 | 66 | 9 | 5 |
| 28 | Ranjir ... | 9,481 | 33·60 | 336 | 0 | 0 | ... | ... | ... | ... | 2,014 | ... | 1,987 | ... | ... | 9,481 | 1,451 | 13 | 3 | 508 | 3 | 2 |
| 29 | Ranipura ... | 7,386 | 44·12 | 300 | 0 | 0 | ... | ... | ... | ... | 2,099 | ... | ... | ... | ... | 7,386 | 1,418 | 3 | 0 | 546 | 0 | 9 |
| 30 | Hathkoo ... | 18,558 | 126·00 | 430 | 12 | 0 | ... | ... | ... | ... | 3,996 | ... | 10,148 | ... | ... | 18,558 | 2,163 | 1 | 5 | 1,045 | 0 | 4 |
| | **BALAGHAT DISTRICT.** | | | | | | | | | | | | | | | | | | | | | |
| 31 | Pandratola ... | 4,960 | 17·00 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4,960 | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | **WARDHA DISTRICT.** | | | | | | | | | | | | | | | | | | | | | |
| 32 | Dhuga ... | 14,171 | ... | ... | ... | ... | ... | ... | ... | ... | * | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 33 | Erjhar ... | 11,811 | ... | ... | ... | ... | ... | ... | ... | ... | * | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |

* Not known, permits for grazing referring to the Unreserved forest as well.

FORM F.

*Return showing the quantity of Forest produce removed by purchasers from State Forests in the Central Provinces during the year 1876 77.*

| No. | Name of Reserve. | Building wood. | | | Number of bamboos. | Manufactured produce. | | | Fuel. | | Grass. | | Lac, Gum, Fruits, Fibres, &c. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Number of logs. | 2 bullock carts. | 4 bullock carts. | | Number of cart axles. | Number of mats. | Number of baskets. | 2 bullock carts. | 4 bullock carts. | 2 bullock carts. | 4 bullock carts. | 2 bullock carts. | 4 bullock carts. |
| | **Northern Division.** | | | | | | | | | | | | | |
| 1 | Barela ... | . | ... | | ... | ... | ... | ... | ... | ... | 16 | ... | 1 | ... |
| 2 | Bijeragogarh ... | . | ... | | ... | ... | ... | ... | ... | ... | 101 | ... | 18 | ... |
| | **Western Division.** | | | | | | | | | | | | | |
| 3 | Kalibheet ... | | 57 | 44 | 32,679 | ... | ... | ... | ... | . | 43 | ... | 8 | ... |
| 4 | Rajaborari ... | 1,025 | 744 | 34 | 1,23,118 | ... | 7,920 | ... | 1,082 | 166 | 837 | 20 | 24 | 4 |
| 5 | Saoligarh ... | 265 | 430 | 24 | 71,810 | ... | 216 | ... | 356 | 82 | 300 | 38 | 5 | ... |
| 6 | Punassa ... | ... | 376 | 152 | 1,36,045 | ... | ... | ... | 51 | ... | 213 | ... | ... | ... |
| | **Pachmarhi Division.** | | | | | | | | | | | | | |
| 7 | Bowergarh ... | 50 | 49 | ... | 15,146 | ... | ... | ... | 1 | ... | 74 | 11 | 7 | ... |
| 8 | Kamapur ... | ... | 280 | ... | 2,927 | 270 | ... | ... | 23 | ... | 75 | 9 | ... | ... |
| | **Central Division.** | | | | | | | | | | | | | |
| 9 | Satpura Reserve. Sonawani ... | . | 35 | ... | 3,33,251 | ... | ... | ... | 1,129 | ... | 5,076 | ... | 243 | ... |
| | Satpura Reserve. Korai ... | | 4 | ... | 58,287 | ... | ... | ... | 647 | ... | 2,813 | ... | 23 | ... |
| | Satpura Reserve. East Pench ... | ... | 3 | ... | 40,149 | ... | ... | ... | 690 | ... | 1,543 | ... | 21 | ... |
| | Satpura Reserve. West Pench ... | | 41 | | 83,984 | .. | ... | ... | 736 | ... | 2,390 | ... | 8 | ... |
| | **Southern Division.** | | | | | | | | | | | | | |
| 10 | Mohurli ... | 31,387 | ... | ... | 8,40,923 | 24,748 | 2,34,922 | 77,473 | 305 | ... | 4,550 | ... | ... | ... |
| | **Saugor Division.** | | | | | | | | | | | | | |
| 11 | Garhakota .. | 4 | | ... | ... | 80 | 186 | 20 | 725 | ... | 107 | ... | 10 | ... |
| 12 | Tijora ... | | 1 | ... | ... | ... | ... | .. | 45 | .. | 23 | ... | 26 | ... |
| 13 | Ranjeer .. | | 30 | ... | ... | ... | 67 | ... | 502 | | 25 | ... | 39 | .. |
| 14 | Hathkoo ... | ... | 27 | ... | ... | ... | 104 | ... | 351 | ... | 143 | .. | 719 | .. |
| | Total ... | 32,731 | 2,077 | 254 | 17,38,319 | 25,098 | 2,43,415 | 77,493 | 6,643 | 248 | 18,329 | 78 | 1,152 | 4 |
| | Estimated equivalent in tons... | ... | 742 | 181½ | 6,953¼ | 256 | ... | ... | 2,372½ | 177 | 6,546 | 55 | 411½ | 3 |

FORM No. 47—(SUGGESTED).

FOREST DEPARTMENT, CENTRAL PROVINCES.

*Area of Forest Tracts protected from fire during the dry season of* 1875-76 (*to accompany Report for* 1876-77.)

| Division | Forest Tracts. | Up to 30th June 1876. | | | | During dry season of 1875-76. | | | | | | Total cost up to 30th June 1876. | | | Year when protection commenced. | emarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Area actually protected. | Total cost. | | | Area attempted to be protected | Failures. | Actually protected. | Amount expended. | | | | | | | |
| | | | | a. | p. | | | | Rs. | a. | p | Rs. | a. | p. | | |
| Northern .. | Banjar Valley ... | | | . | ... | 49,725 | 230 | 49,495 | 826 | 12 | 9 | 826 | 12 | 9 | June 1875 | |
| ,, ... | Motinala ... | | ... | . | ... | 1,659 | | 1,659 | 43 | 9 | 3 | 43 | 9 | 3 | ,, 1875 | |
| ,, ... | Jagmandal ... | 24,503 | 16,327 | 8 | 2 | 24,503 | | 24,503 | 528 | 6 | 2 | 16,855 | 14 | 4 | ,, 1867 | |
| ,, ... | Choharigogarh ... | 1,661 | 4,268 | 10 | 11 | 1,661 | ... | 1,661 | 120 | 10 | 9 | 4,389 | 5 | 8 | ,, 1867 | |
| ,, ... | Barela ... | 7,153 | 703 | 6 | 0 | 7,153 | ... | 7,153 | 117 | 3 | 0 | 820 | 9 | 0 | ,, 1872 | |
| ,, ... | Singrampur ... | 6,555 | 1,088 | 5 | 4 | 6,555 | ... | 6,555 | 184 | 1 | 2 | 1,272 | 6 | 6 | ,, 1871 | |
| ,, ... | Bijeragogarh ... | 21,188 | 1,694 | 9 | 7 | 21,188 | | 21,188 | 578 | 10 | 2 | 2,273 | 3 | 9 | ,, 1871 | |
| Western ... | Kalibheet ... | 7,680 | 20 | 0 | 0 | 11,520 | 7,560 | 3,960 | 140 | 8 | 8 | 160 | 8 | 8 | ,, 1874 | |
| ,, ... | Punassa ... | . . | 145 | 7 | 9 | 34,100 | 1,650 | 32,450 | 656 | 14 | 1 | 802 | 5 | 10 | ,, 1875 | |
| ,, ... | Rajaborari ... | ... | ... | ... | ... | 11,400 | 4,800 | 6,600 | 512 | 15 | 3 | 512 | 15 | 3 | ,, 1875 | |
| ,, ... | Saoligarh ... | . | ... | ... | ... | 13,000 | 2,000 | 11,000 | 509 | 11 | 2 | 509 | 11 | 2 | ,, 1875 | |
| Pachmarhi ... | Bori ... | 23,680 | 9,399 | 3 | 1 | 23,680 | ... | 23,680 | 626 | 6 | 9 | 10,025 | 9 | 10 | ,, 1864 | |
| ,, ... | Bowergarh ... | 15,074 | 571 | 0 | 10 | 34,560 | 6,400 | 28,160 | 451 | 1 | 10 | 1,022 | 2 | 8 | ,, 1874 | |
| ,, ... | Kamapur ... | ... | ... | | | 15,680 | 14,400 | 1,280 | 66 | 10 | 3 | 66 | 10 | 3 | ,, 1875 | |
| Central ... | Korai ... | 31,210 | 4,065 | 11 | 6 | 31,210 | 16,240 | 14,970 | 767 | 8 | 3 | 4,833 | 3 | 9 | ,, 1869 | |
| ,, ... | East Pench ... | . | ... | | ... | 41,600 | ... | 41,600 | 1,251 | 10 | 1 | 1,251 | 10 | 1 | ,, 1875 | |
| Eastern ... | Hathibari ... | 2,123 | 2,084 | 15 | 9 | 2,123 | ... | 2,123 | 126 | 5 | 11 | 2,211 | 5 | 8 | ,, 1870 | |
| Southern ... | Bemaram ... | 12,296 | 2,691 | 5 | 9 | 12,296 | ... | 12,296 | 1,791 | 11 | 6 | 4,483 | 1 | 3 | ,, 1873 | |
| ,, ... | Mirkullu ... | . | ... | ... | ... | 5,268 | ... | 5,268 | 886 | 13 | 2 | 886 | 13 | 2 | ,, 1875 | |
| ,, ... | Taroba . . | . | 587 | 11 | 0 | 25,619 | 1,600 | 24,019 | 1,287 | 1 | 0 | 1,874 | 12 | 0 | ,, 1874 | |
| ,, .. | Goverdhan ... | 6,720 | 528 | 2 | 10 | 13,817 | | 13,817 | 758 | 10 | 7 | 1,280 | 13 | 5 | ,, 1874 | |
| Saugor ... | Garhakota ... | 2,899 | 15 | 0 | 6 | 2,899 | 220 | 2,679 | 29 | 11 | 1 | 44 | 11 | 7 | ,, 1874 | |
| ,, ... | Hathku ... | 746 | 24 | 6 | 3 | 10,598 | ... | 10,598 | 265 | 11 | 0 | 290 | 1 | 3 | ,, 1874 | |
| ,, ... | Ranjir ... | 402 | 5 | 5 | 0 | 1,987 | ... | 1,987 | 12 | 15 | 2 | 18 | 4 | 2 | ,, 1874 | |
| Balaghat District | Pandratola ... | 4,960 | ... | ... | ... | 4,960 | ... | 4,960 | ... | ... | ... | ... | ... | ... | ,, 1872 | |
| | Total .. | 168,850 | 44,220 | 14 | 3 | 408,761 | 55,100 | 353,661 | 12,541 | 11 | 0 | 56,762 | 9 | 3 | ... | |

| | | | |
|---|---|---|---|
| Charged in previous years... | 40,893 | 7 | 10 |
| ,, 1875-76 ... | 9,736 | 15 | 7 |
| ,, 1876-77 .. | 6,132 | 1 | 10 |
| Grand Total... | 56,762 | 9 | 3 |

FORM No. 47.—(SUGGESTED).

# FOREST DEPARTMENT, CENTRAL PROVINCES.

*Area of Forest tracts protected from fire during the dry season of 1876-77 (to accompany Report for 1876-77.)*

| Division. | Forest Tracts. | Up to 30th June 1876. | | | | During dry season of 1876-77 | | | | | | Total cost up to 30th June 1877. | | | Year when protection commenced | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Area actually protected. | Total cost. | | | Area attempted to be protected | Failures. | Actually protected | Amount expended | | | | | | | |
| | | | Rs. | a. | p. | | | | Rs. | a. | p. | Rs. | a. | p | | |
| Northern ... | Banjar Valley ... | 49,495 | 826 | 12 | 9 | 49,725 | ... | 49,725 | 481 | 15 | 11 | 1,308 | 12 | 8 | June 1875 | |
| „ ... | Motinala ... | 1,659 | 43 | 9 | 3 | 1,659 | 88 | 1,571 | 39 | 3 | 9 | 82 | 13 | 0 | „ 1875 | |
| „ ... | Jagmandal ... | 24,503 | 16,855 | 14 | 4 | 24,503 | 10 | 24,493 | 460 | 1 | 4 | 17,315 | 15 | 8 | „ 1867 | |
| „ ... | Choharigogarh ... | 1,661 | 4,389 | 5 | 8 | 1,661 | ... | 1,661 | 76 | 10 | 5 | 4,466 | 0 | 1 | „ 1867 | |
| „ ... | Barela ... | 7,153 | 820 | 9 | 0 | 7,153 | 7 | 7,146 | 130 | 11 | 6 | 951 | 4 | 6 | „ 1872 | |
| „ ... | Singrampur ... | 6,555 | 1,272 | 6 | 6 | 6,555 | 10 | 6,545 | 62 | 7 | 0 | 1,334 | 13 | 6 | „ 1871 | |
| „ ... | Bijeragogarh ... | 21,188 | 2,273 | 3 | 9 | 21,188 | ... | 21,188 | 465 | 15 | 11 | 2,739 | 3 | 8 | „ 1871 | |
| Western ... | Kalibheet ... | 3,960 | 160 | 8 | 8 | 14,080 | 646 | 13,434 | 68 | 4 | 2 | 228 | 12 | 10 | „ 1874 | |
| „ ... | Punassa ... | 32,450 | 802 | 5 | 10 | 43,700 | 4,100 | 39,600 | 616 | 10 | 0 | 1,418 | 15 | 10 | „ 1875 | |
| „ ... | Rajaborari ... | 6,600 | 512 | 15 | 3 | 64,810 | 714 | 64,096 | 442 | 11 | 8 | 955 | 10 | 11 | „ 1875 | |
| „ ... | Saoligarh ... | 11,000 | 509 | 11 | 2 | 48,840 | 80 | 48,760 | 203 | 10 | 11 | 713 | 6 | 1 | „ 1875 | |
| Pachmarhi ... | Bori ... | 23,680 | 10,025 | 9 | 10 | 23,680 | ... | 23,680 | 752 | 8 | 10 | 10,778 | 2 | 8 | „ 1864 | |
| „ ... | Bowergarh ... | 28,160 | 1,022 | 2 | 8 | 34,560 | 10 | 34,550 | 345 | 4 | 6 | 1,367 | 7 | 2 | „ 1875 | |
| „ ... | Kamapur .. | 1,280 | 66 | 10 | 3 | 15,680 | 1,920 | 13,760 | 71 | 6 | 1 | 138 | 0 | 4 | „ 1875 | |
| Central ... | Korai ... | 24,970 | 4,833 | 3 | 9 | 31,210 | ... | 31,210 | 781 | 3 | 11 | 5,614 | 7 | 8 | „ 1869 | |
| „ ... | East Pench ... | 41,600 | 1,251 | 10 | 1 | 42,560 | ... | 42,560 | 869 | 6 | 3 | 2,121 | 0 | 4 | „ 1875 | |
| Eastern ... | Hathibari ... | 2,123 | 2,211 | 5 | 8 | 2,123 | ... | 2,123 | 114 | 3 | 0 | 2,325 | 8 | 8 | „ 1870... | Expenditure nominal, protection being secured for greater part of year by coolies employed in other work |
| „ ... | Kantranala ... | ... | ... | ... | ... | 3,548 | ... | 3,548 | 34 | 4 | 0 | 34 | 4 | 0 | „ 1876.. | Protection secured by men employed on other work. |
| Southern ... | Bemaram ... | 12,296 | 4,483 | 1 | 3 | 12,296 | ... | 12,296 | 1,068 | 8 | 8 | 5,551 | 9 | 11 | „ 1873 | |
| „ ... | Mirkullu ... | 5,268 | 886 | 13 | 2 | 8,479 | ... | 8,479 | 1,098 | 3 | 2 | 1,985 | 0 | 4 | „ 1875 | |
| „ ... | Taroba ... | 24,019 | 1,874 | 12 | 0 | 25,619 | 300 | 25,319 | 1,060 | 9 | 7 | 2,935 | 5 | 7 | „ 1874 | |
| „ ... | Goverdhan ... | 13,817 | 1,286 | 13 | 5 | 13,817 | 285 | 13,532 | 620 | 12 | 6 | 1,907 | 9 | 11 | „ 1874 | |
| Saugor ... | Garhakota ... | 2,679 | 44 | 11 | 7 | 2,899 | ... | 2,899 | 3 | 2 | 6 | 47 | 14 | 1 | „ 1874 | |
| „ ... | Hathku ... | 10,598 | 290 | 1 | 3 | 10,598 | 4,896 | 5,702 | 189 | 4 | 8 | 479 | 5 | 11 | „ 1874 | |
| „ ... | Ranjir ... | 1,987 | 18 | 4 | 2 | 1,987 | ... | 1,987 | 9 | 9 | 0 | 27 | 13 | 2 | „ 1874 | |
| Balaghat dist. | Pandratola ... | 4,960 | ... | ... | ... | 4,960 | ... | 4,960 | 31 | 0 | 0 | 31 | 0 | 0 | „ 1872 | |
| | Total ... | 353,661 | 56,762 | 9 | 3 | 517,890 | 13,066 | 504,824 | 10,097 | 13 | 3 | 66,860 | 6 | 6 | ... | |

| | | | |
|---|---|---|---|
| Charged in previous years... | 50,630 | 7 | 5 |
| „ 1876-77 ... | 10,218 | 9 | 2 |
| „ 1877-78 ... | 6,011 | 5 | 11 |
| Total ... | 66,860 | 6 | 6 |